

<110> Conner, Timothy W.
Masucci, James D.

<120> Nucleic acid molecules and other molecules associated with
plants

<130> 38-21(15726)B

<160> 11840

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<213> Triticum aestivum

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caagatgtat acaaggctta tagtacttca taacatgctc aaactcacac acacacacac 240
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<213> Triticum aestivum
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gacgacgacg acgattgac gtagcggcct catagcacc cttaccagtt acctcaaaca 180
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ccaggatagt tgagtgggtg tgatagtggg gttggtgtaa atgtttgctg ggggtaaaat 300
gcattcatct gatactatgg tttatatccc tgtttttggc caaagaaaga aagaagacga 360
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cgcatga 427

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 ccaaggtgga ctactacctg cgcctcttcg gtccttggga ggaattcctc cgggcattca 180
 agcataacca caatctctc tcacacaacc tcgagacggg ggtcaagcgg aatgtcgggt 240
 tgctgcagga gtgcacgcta ggtgcttgcg acattgcaa gcttgccatc tctatgcaa 300
 ggatgctcac cgccaacgtg gaacaaatcc gggggatggt ggccggtgct gagcgtctaa 360
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 <212> DNA
 <213> Triticum aestivum

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 cctgcaagtc aactacgaga agcacaagtc catgtgctac agcctccatg tccatgtcct 180
 ccctttcttc aggttctaca ggggagctca gggcagggtc agcagcttca gctgcaccaa 240
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 <213> Triticum aestivum

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ttggcataaa atcctatgca ggtattgctg cggaggggtat cggaaacgga gcgctcttga 180
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tttcatcttt tgcttggtat gatagtattt caaccctttt tgtgggaaaa gctgatattg 360
gttagatggt gggatataga gagccataga gggaacctaa caacgacatt ttcggcagca 420
cgggccattc tttgcatatt gccctgccgt ttggtgc 457

<210> 10

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-B6

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gttcgtgctt gtccattgtc gcctgtgtca aatcatcagt atgacatcgt ggaatacgt 180
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<210> 11

<211> 460

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-B7

<400> 11

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aagaggcaag caaagagtgg ctgatgtact ttgatgggtg cttctcgctg caaggcgccg 240
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tcgtctgcca agtgaacaag aactaccaga gtccattgat 460

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<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E1-B8
<400> 12

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caagatcaat gccgcgaaaa aggggcatta ccataagctg gggctaagtg tctaagttgt 180
ggcccgggct aagttggata aaggtgaaca acagatgggt tatgcaaggg tcattccaat 240
tacattgagc tgggcccccg ggtccaagac ttgggtccaa atgcattgga agatattggg 300
cccaaagaca aggcaagttt tggagaaagg gaagtcctaa aggaaccac ctcaaaatac 360
ttgttgcaat ataagaagct cgaacggggg gtgttcacgc ccaacagaga gaa 413

<210> 13
<211> 459
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E1-C10
<400> 13

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 gtgctacccc gagtgggttc aactttgttt acttcaccgc atgtcaaagt ggcctctagt 360
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 cgaactcata cgattttccg ctgaaaaaaa tagcggaaag catcaccgcc atggccagca 180
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 aacacgag 248

<210> 15
 <211> 382
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-001-Q1-E1-C6
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 cggttgctgc ccacgcgtca gtcacgcccc caaaaaccct tcttccaaaa ggaagggaat 180
 gactgcaatt gggcaaccaa atttttgggc ctgccattgg cctgcaagggt aattcagggtg 240
 gggtttcccc ccggcccaat tccggttttc cgtttaattt tccaatttgg tttccaagggt 300
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 ccgatttat tccgggaacc cc 382

<210> 16
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-C8

<400> 16

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 tgaaggagga agtaaagtgc atcaaagcca ttatagagag gctgatacag agggaaggcc 180
 atcttgtagt catagacgaa ggaacagcgg cagcagaagg tgctgcagca agggcatcgg 240
 agcacagaat cctggctgtt aaccgaact acgtcattga ttgattaacc agctgaagac 300
 acagctaact aaattcaaca aatgttggtg accaatagaa caagaaattc aaccggaaaa 360
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<210> 17
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-C9

<400> 17

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 cagtgccgag tactgaagca tttgattttg atgatgccgg tgttctttca atcaagtagg 180
 cacgtgtagt gtttgccggt actcgaagag cacagaggct gtagtctgta aattatactt 240
 tgtaacagtt ttcctaatca ttcttcagta tcccaggctt ccttttttcg ctggagagac 300
 aggatgagat tttatttgtt aggatttcag aataagggtcc taatacatTT gtttctttgc 360
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 ccttctgcaa aataaaa 437

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 <211> 382

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 gcattgcttt gagttgaaca tgcattggaga tgctgtgcag actcatgacc ttgcaggaac 180
 tcgacgaaca gtcgccgact gcatgtattc accaatgaga agactggagt tttccgatgg 240
 tgtgtctgtt gaaggctcga ggatgtcaac cgcaacgcct cgttcagaaa aaggcaaggt 300
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 cggtgacagg atcgatccta ta 382

<210> 19
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 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E1-D5
 <400> 19
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 ttagttgaac atgcatggaa gatgctgtgc agacggacga ccttgacggg acaccactaa 180
 tagtcgtcga ctgcatgtca tcacccttca gaagagtggg cttttcccaa ggcagtgggc 240
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 agcagaaccc cttttcagct gcagacttcg gcacaaaaa gcccctcccg ctactgttac 360
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gggggaggag ggctatatat agtgtgagcc caaatgtggc cgttgtaatg caagtacggg 180
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acctaaacca gaggaaaaaa cagagggggc ggacatccgg ggccaagccc agacatccgg 300
catatcagga aagccagac atccggcaca tggccggaca tccggcaagt tcaccaaadc 360
gaatagccct ctagatagca caagccggac gtccgacaag ggagccca 408

<210> 21
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<400> 21

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tccacatacg gccccgaacg atgtgtatag ggtttcgaga caccaaacgg gcgccccgaca 180
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<210> 22
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<213> Triticum aestivum
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<400> 22

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acggcctttg gacgatgtca ggaacggggg acct

154

<210> 23

<211> 479

<212> DNA

<213> Triticum aestivum

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<400> 23

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ttgtagaacc taattttgta gttggggccc cgtcgtccac taggttatct gaagctggtg 180

gtcagttaaa ttgtgttgtt ttaccagatt ctcaggctaa gaatgggcgt tttgtaaaga 240

tgctggattc aatctcggtt cccctgctt ttgcagcaga gttcccaggc aaatccttgt 300

ctggtgtgca ccctaacacc atcagcgtgt ctaccgaagt aatcagcata ggaagcttaa 360

ctgttgcttc tcgacaaggc aagtggtcgt tccagaagga tgaagacatg gagcttctct 420

tctccacagg tttccagcct gataaccgca tacactgtgg tggctgcaac acagtgact 479

<210> 24

<211> 398

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ccaatctgct accatggata acgttcaca taccaatagc acctactgca acaacataga 180

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ctgctcacgg caatcgctgt tatgaccgca atcagtcagg atatcgtggc cagaccaagc 300

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gcttcatgca ttactcgcaa cgcgccatca tgaggtgc 398

<210> 25
 <211> 456
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
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 <400> 25

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 cacgatgtcc aagacaagca tgaccacaaa gtagtcttat aataaaacac taccgagttc 180
 aggaggggga accatcaacg agggatcga agtccttaca taaatccgga ttagctctta 240
 tgaagaaact ctttctcctt gaacaaatca atcagtggct tgggtgtgcta gggatacata 300
 tagattgaag gttgcaagtc ttcaaaccac agcattcttc gcacgtgtgc atgactgatt 360
 tggaatgatt ccaaagaaag caacattgac tttctcgaat ccatggcggc aacttgcac 420
 agatgcacat gaattaaagg aagtcactaa cttcat 456

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 <211> 440
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 <213> Triticum aestivum

 <223> Clone ID: LIB103-001-Q1-E1-E5

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 ttctatgacg ataattgtga caaaaccgg tagcatcata gatgtggtag gtcctactt 180
 ctatgacaaa aaatcatgac agaaaatggg cttttcatcc tgggcgggct ggagacgcag 240
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 aaaatttcgg gaagtttccg gttacggtg gaggtccgag gccgagcgat gcgcgtttct 360
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 tgggctctaa ctgaaccga 440

<210> 27
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-E6

<400> 27

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 gtgaggtgat ttctgagacc tatgttctcg aatacggaaac tgattgtctg gagatgcatg 180
 ttgggtctat cgaacccccgt gagcgtgttt tgatagttga tgatctgggt gcaactgggtg 240
 ggacactttg tgctgctata aatcttctgg aacgtgctgg agctgatgtc gttgagtgtg 300
 cttgtctcat tgggctccct aaatttaaag atttttaciaa gctcaacggg aagcctgtct 360
 atgtactggt ggagtctctg gaatatgaaa aataagaaac cggtgaccag ggacgcacca 420
 tggcttcac cgtctgccgt agtattaggg agtgggggag 460

<210> 28
 <211> 449
 <212> DNA
 <213> Triticum aestivum

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<400> 28

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 cgacagcgag ctccgatgag tgcaacgaat ggaagccagg cgtcggctta caacaatgat 120
 tcgggtgcct gtggcatgat ggagagccgc cgctgaaagc tcagtgatgg ggcgagttgg 180
 ttgaggcgtc aatggcacct ttgctcgtga ccgaggatgg cacttgacaca gctgaagtaa 240
 gatgcaggcc aacttcagcc tccaaggctt ccctggcacc ctctctgcc actacgtgct 300
 caacaacaag gtcttcgaag ggtaggggt tagggcaact cgatggtagc cagtcggagt 360
 ttgctaggtt acatatgcaa gtccttttga aatctcaaac ttctttgtgg tgatgagctt 420
 ctgctcatct tgattgattc ctctacagt 449

<210> 29
 <211> 441

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E1-E8
 <400> 29

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 gtgcagacaa gtgggtcttta cagcataaat caattcctga caagttgcaa agcctgtaca 120
 atgatggcta caagttgggtc atattcacca atgagtcaaa cattgagcgc tggaagaata 180
 agcggcagca agctgttgac tcaaaagttg gacgccttga caactttatt gagtgtgtta 240
 aagtccctat tcaggttttc attgctgtgtg gtactgggaa aggaaaaggc acaccggatg 300
 atctgtttcg caaaccaaat tcaggaatgt ggtggttgat ggcagagcat ttcaattctg 360
 gaattgccat cgacatggga ccaatctttc tatgttggcg atgctgctgg gaaacagaat 420
 gatcatagtg acgcagatat a 441

<210> 30
 <211> 416
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-001-Q1-E1-F12
 <400> 30

cgctgcccg taccgtgtcc gaaactcncg ggtcgacagg cgacggcgga ggcgcccaca 60
 tcaacctcaa ggtcaagggg caggatggca atgaggtttt cttccgcatac aagagatcga 120
 cacagctgaa gaagctgatg aacgcctact gcgacctga gtctgtggat ctcaactcca 180
 ttgctttcct tttcgatggg cgtaggctcc gtggtgagca gaccctgat gagctggaga 240
 tggaggaagg cgacgagatc gacgccatgc ttcaccagac cggaggggtgc tttcctcgcc 300
 cttagaagga gcttgcttgc agcctggctg ttctatgtcg tatgctacct ttagaactag 360
 agtaaaatgt aagaagtga agaacttgtg aggctatggg tctgtgccat aacctg 416

<210> 31
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-F5

<400> 31

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aacactgagc atcggctata ggagatccac catggtgaac accgttagac agatgccggg 120
ttttgccaac acaatgaatt atgagggcga tatgcaaata tcgaccatgc gttcttatct 180
caaaagtgct cgggagtccg ttcaccaaag tgtgaatagc cgaaataagt cagatgtttc 240
ggctgaggat aaattccata gcgttgattt tgatggtacg atcgaagaat atggatgaga 300
cgcctcttgg agtctcctat atgaaaattg tcgtccttgc ctacgggctt tacacttgta 360
ctcccttaat tccactagct tcgcaatagg agatgtgatg ccgctcaatg actcgaggat 420
ttcccttaag aacccaagcc atgt 444

<210> 32

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-F6

<400> 32

attcccgggt cgaccgggca gaagaaaaag atcaccatca ccaacgacaa gggcaggctg 60
agcaaggagg agattgagaa gatggtccac gaggctgaga agtacaagtc tgaggatgag 120
gaggagatga agaagggtgga gtcgaagaac gccctggaga actaatcgta caacatgcgc 180
aacaccatca aggatgagaa gatcacctcc aagctgccgg cggacgacaa caagaagatc 240
gaggacgcca ttgacactgc catccaatga ctggacacaa accagctcgc tgatgcggat 300
gacttcgaag acaagatgaa cgagcttgac gctctgtgca accccatcat cgccaggatc 360
taccaggggtg ctggtgccga aatggaaggc cgcattggacg atgaaagccc gggctgcatc 420
cggcgggtgct ggggtccaaga 440

<210> 33

<211> 461

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-F7

<400> 33

cctgcccggta ccggtcctga attccccgggt cgacgggtgc tcctgttttag taataaataa 60
ttcatctagc ctctgggttaa atgtgggtttt gtgttttaaat tagtgtttgt gctaagtaga 120
acctttggga agacttgggt gaagtcttta taatcttgct gtaaaaaaca gaaacttttg 180
cgctcacgag attagcggcc attttttact ggagagtgat tttagggtga ttagtttttc 240
agaagattaa tagacaaatt cctcagggtcc accaatttat ttcagaattt ttggagttac 300
ataagtatgc gtttgataca gattgctaca gactgttctg tttttgacag attctgtttt 360
ccttggtgttg tttgcttatt ttgatgaatc tatgagtagt atcgcagggt atgaaccata 420
gataagttgg aatacagtag atattacact aatatgaatt t 461

<210> 34

<211> 374

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-F8

<400> 34

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gagtggtcct gtccaagacg aggagcatat tgcttctctg aggcctaaaa gatcaaagag 120
actagtgagg agcacgggtg aggataagga atccgttgct gcttgtgatg ttgagaaaacc 180
tgcagatgca gctgaaaaca atgacaacaa tgatgcacaa gagttgcaat atccttcagc 240
ctagtggacc tactgggttg acctgatgag aacataagat gcaaatggca agacccaaat 300
ttttggggtc aattaggagc atcaaggatg gaacccaaag gaggacctcg ggtttgcctt 360
aaggggttac caat 374

<210> 35

<211> 374

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-G11

<400> 35

tggtacgcct gcccgtagcg ttccctaagct cccgggtcga cagctgcaac aaacacgggg 60

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 ggatcatatca ccggtctact gtcagtcagt ccgccgtggg aacttgcgga tgtttgtcgc 180
 aataagacag acgcaggtga ttctgagtcc aactaggatt agttgtatga cggtgggcga 240
 agcattttgc cacgtacgca agtgaggacg cctaggtgtt cgtcacattg ctgagccagc 300
 agcggctgcg taataacaag gtcggaaaac caggggccat gtactagcta aagtaagcaa 360
 aaagtgtgtt tgta 374

<210> 36
 <211> 483
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-G4

<400> 36

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 cgtgcagtac atcatcctcg acagggatgat gcagcagcca tcagcagcat cgtcaggagg 120
 ggcatgctgg atgagctcaa gaagaccctg gtcaggagga gcattcaggt aagaacagag 180
 caacacaaat tgtcatgttt ctaagggaat tagagcatgc tttgtgatat gaacaatggc 240
 tgatttatcg ttttgtaaac ctaaactttc caacaaactt gcgagaaatt tatattcaga 300
 tggcacatgg aaatttatat tcagatgata tggctacttc atattagggga gatattttcg 360
 agtggagagc atattaagtt accatcagtt ttcttgacat accaaattga tgttggaaac 420
 gtagtcattg gtaatgttaa ttaattgcc tggcaaaaat actttttaat aaagtcgcca 480
 tca 483

<210> 37
 <211> 368
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-G6

<400> 37

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 tatggcattt ccatagctat tccgagatat atttccatgc aactttccac cgttccgttc 120

atcatcatca tgacatgcgt tacttttgtc atattgccat tgcattgatca tgtagttgac 180
atcgtatttg tggtaaagcc actacgcata atttttatac atgtcactct tgattcattg 240
caccatcccg gtacaccgcc ggaggcattc atatagagtc acatcttggt ctagtttcga 300
gttgtaattc atgtgttgta atcaataaaa gtgtgatgat catcattatt agagcattgc 360
ccagaaag 368

<210> 38
<211> 191
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-G7

<400> 38

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acatgaagct cagggatgac cttgagaggc tcaagaagat caggaaccat cgtgggtctgc 120
gtcactactg ggggtgtgcgt gtcggcgggg agcacaccag gactaccggc aggacaggaa 180
agactgttgg t 191

<210> 39
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-G8

<400> 39

attccccgggt ccacgggagg ttctcacagg tcgtgtccaa cgccgtggac atgaagctca 60
gggatgacct tgagaggctc aagaagatca ggaaccatcg tgggtctgcgt cactactggg 120
gtgtgcgtgt ccgcgggtcag cacaccaaga ctaccggcag gagaggaaaag actgttggtg 180
tctccaagaa gcgataagct gcttcacaaa gattcctcat agctttgcta ctactgtgtt 240
ggtcatttc cagaatctta agggagtgtt cttatttaga tgattacctt ggatgatgtt 300
ttgccctaga taatgttttg gttctggaac ctttaataata ttgtatcttg aattccttgt 360
tgaactcgta caagagtttg ttttgccatg tgcttccagt gaaaa 405

<210> 40

<211> 428
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-H5

<400> 40

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 aatatctggt gcagccgctt ggccgtgctg aagacgaaga gcattccagt gacttcgagc 120
 cagaagaaaa tggatgatgg gctgaggacg aggagattga ggatgacgat gctgaggatg 180
 gtgaggatcc tgtcaaggcg caatcccat caaagaggaa gaggtctggt ggggaggatg 240
 aagatgatga cgacggtgat gatgatggtg atgatgatga gaagcctcca tcaaagcgat 300
 agtcaatttg ttcgtgctga tctgtgatct tctctgcttg ggccaagaag gaaaataatc 360
 ctcatggaga ggattgttgg taaatgctgt agctttagga catctgtggt aggtgtagca 420
 gctcaaac 428

<210> 41
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E1-H6

<400> 41

ctgccggtac cggctcctaaa ttcccgggtc gacgggtgcc ccgatggca tcccctcttt 60
 cgtcttcggt catcggtaac ttacttgga gctatatttt tattcgccac atgatggcat 120
 cccctgtttt gcttgaggca ttattttatt ttgctagttt ttgcttgctg tcagttagca 180
 taatgttttg catctttagt ttcaataaaa aaagtcaagg atagcctttg ccatgcttaa 240
 tttgctagtt tgcattgtgc tgtttgaaaa cagaaagttc accgttggtg caaaaattcc 300
 ctagaaaagt catagaatgg tataacgttg aatctttttg catattaagc tctgataaat 360
 ttattacagt aggaatttta gttcataatt tgtggattca gggaagtatt ttactcctg 420
 cattctttac atactgtact gttttcgag attgctgtta 460

<210> 42
 <211> 337
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E1-H7

<400> 42

ggctctgaat tcccgggtcg acgacagcgt gaatgatgca cctacacccc tgccctggtc 60
gaggtgggcc ggccggattt gtgaccagcc atgagcagag agagagagtg tgtggccgcc 120
tatgtcttgc gtagatctag agagcatgag agagtgaac agaggaaccc tagtagagca 180
agcgctaagg ctctctgctta tatatatggt ggagtgattt tgttgtacca gcttcaaaaa 240
aatgcgctcc tacgtgtacc cgcgagtggg tgtgagagaa ctagtgctg cgtgcaccgc 300
ttctcgtcgt gagagtacaa gatacgtgc ccaaaga 337

<210> 43

<211> 421

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E2-A1

<400> 43

taccggtcct aaattcccgg gtcgacgggc ccttaggttt gcaggagcgc ctagtgggtc 60
atctgaagga aaggacaaag acacctccaa gccggacacg gctactgtag ctggcacggc 120
ataatggaaa acagtccctg cccttttgag ggctgtctca aacatgcccc tcgagacgtc 180
ggtgaagccg tagtttgtac aagactaaca acgccaatgg cgtcgatgtt atcggagcca 240
ttcgtgtgct gtttactgtg tagcgcttga tgacttcctt gctgtactcc gcttgagacc 300
atttgagtgc tgtttaccgt gcagcactcg aagacttcct tgctgtactc gctggcagca 360
tagtctgttt gctgcctggg ctggggacac ctgtgtacta cagtacttcg tttccctttg 420
t 421

<210> 44

<211> 430

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E2-A10

<400> 44

taccggacct aaattccggg tcgacggggc gtcacactat atcaatcaac aataattctt 60
gccgaatgaa aagttccagt agttcactct ataatcctag tattgggttac atgcacacac 120
atctcagtgt aatccaacaa tatctacaca gggctctgtt tttgtgctag tgacaagttg 180
agttagtgtc aatgggtctag ctgctaaaca agcagacctg agttcgacga tgtaccgatc 240
aatcctttga tcccgagaat agttttttta gtgggttgatc ccgatcacga gaaaagtgaa 300
tcgagaaaac tgatcgcaat tgatgatgag aaaatcgaaa accggtaggg cctaaaaacc 360
aaggattgac atacaagaaa ggaaaatgct tgtggctggc agggcagccg aactttaagc 420
tggtcatgca 430

<210> 45
<211> 388
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-A11
<400> 45

attcgcggtt cgacttcttc tccccgggt gcggtggctg ccgcgctctc caccccaaga 60
ttgcgcagtt cgctgagcgg aatccggacg tgctgttctt gcaagtcaac tacgagaagc 120
acaagtccat gtgctacagc ctccatgtcc atgtcctccc tttcttcagg ttctacaggg 180
gagcccaggg cagggtcagc agcttcagct gcacaaatgc aaccatcaag aagttcaagg 240
acgccctcgc aaagcactcg ccggacaggt gcagcctcgg cccggcgcggt gggctcgagg 300
aggcggagct cttgggtctg gcggcaaaca gggacctgga attcacctac aacgagaagc 360
cgacgctggt gccgatcgcc gaggttat 388

<210> 46
<211> 146
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-A4
<400> 46

tagtgagtcg tattaactg tctgggtcgg gtcaggatcg gtgggggctg tgcagcggcg 60
cgacgcgtgc ggcggggggt gcggcgccgc tgtgtgggag catgaggacg gcgttcggta 120

cgggatggag taggatggta tgcgag

146

<210> 47
<211> 461
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-A5

<400> 47

gtaccggtcc agaattcccg ggacgacggg atgagagggc tcaaatgag aaggtgtcct 60
accaagctc agtttaatga ggaaattcaa gatgatcaag cagaagctgc tctagtataa 120
aaattgctcg aagagagtgg caatgacacg aagaggaaga aacaacctgt ggatacgacg 180
aatcaggggtg ccaataaaac aaagcagttt aaggcattga cgccaaagga gagcacgcca 240
agaggagcga aagagggtga cagttctttt actgaagggtg gcttatcctc caaactgaaa 300
accaagctga cggttgatgc aaatgatatc attctgggta aaaagaaaaa tgttcaagga 360
aaggatgggt tacaggagaa gaggcaggga gcaagggggg acagtcctgt gtgtggagct 420
tgtggtcagc ttggacatat gcggaccaac aaacgggtgcc c 461

<210> 48
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-A6

<400> 48

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tctgtgaggg ctttttagca aaattacaaa tgaactgagt ctgcgacatg ttttttggga 120
cggagggagt atttcggtag ggatggagta gatggtatgc tagctcaaaa aagaaaaaga 180
gtagatggta tgcaaacagc caaactaagt gcaaccaggc tcgctgggaa aggctaccaa 240
acacggccct agggggccacg tgcagccact caatccactt gcttggtttc actcttgtgt 300
tttgggtggc actcgtgcgg acgaagcatg gaagctcgcg acatgacctg ggctcgcacc 360
caacatcaga cctctcgcgc ccgcacgcac gcccgaagac atggctggag gtggtgcccc 420
caccgcacgc cccgacagct tcatccgaca cgcgggaac 459

<210> 49
 <211> 463
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-A7

<400> 49

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 gagagttgat atcagtttta gaccaaagga aggatgaatc aattgaacgc acatttaaag 120
 gagttgcaag gcacttccgc gaagtgttct ctgaattagt gcaagggtggc cacggatacc 180
 tggttatgat gaagaaaaag gatggtgatg ctgccgatga tgacatggat gaggacgcgc 240
 ctcgtgaagc agatcctgaa gggaggatag agaagtatat tgggtgtgaaa gtcaagggttt 300
 ccttcactgg caagggagaa actcagtcca tgaagcagtt gtctggaggg cagaagacag 360
 tgggtggcatt aacactgatc ttcgctatcc aacgatgtga cccagctccg ttctacctgt 420
 ttgatgagat tgatgctgct ctggattctc agtacagaac ggc 463

<210> 50
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-A8

<400> 50

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 gagagttgat atcagtttta gaccaaagga aggatgaatc aattgaacgc acatttaaag 120
 gagttgcaag gcacttccgc gaagtgttct ctgaattagt gcaagggtggc cacggatacc 180
 tggttatgat gaagaaaaag gatggtgatg ctgccgatga tgacatggat gaggacgcgc 240
 ctcgtgaagc agatcctgaa gggaggatag agaagtatat tgggtgtgaaa gtcaagggttt 300
 ccttcactgg caagggagaa actcagtcca tgaagcagtt gtctggaggg cagaagacag 360
 tgggtggcatt aacactgatc ttcgctatcc aacgatgtga cccagctccg ttctacctgt 420
 ttgatgagat tgatgctgct ctggattctc agtacag 457

<210> 51

<211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-B10

<400> 51

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 ggagattcgg gcgatggaga agacgacgag gggggcggcg gcgccgaaga catggacgac 120
 gacgacgatt gatcgtagcg gcctcatagc accccttacc agttaccta aacaaggggtg 180
 ggcgtccttt tgaccccaca gcattagctt tcttgtacat aggcactctc cagtccagga 240
 tagttgagtg gtggtgatag tgggtgttgg gttaatgttt gctgggggta aaatgcattc 300
 atctgatact atgggtttata tccctgtttt tggccaaaga aagaaagaag acgacgatga 360
 gatcgagcgg ttctgcgcgc ttttcgaaac gcgcccggcc ggtctcgttc gattcgcatg 420
 ac 422

<210> 52
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-B11

<400> 52

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 aacttaagcg tgaggcccg atgaagggtg ggttctatgt cagtcctgag gcaaagctgc 120
 tgtttgtcgt ccgtatccgt ggtatcaatg caatgcaccc aaagaccaag aagatcttgc 180
 agcttttgcg tttgaggcag atttttaatg gtgtgttcct taaggtaaac aaggccacca 240
 ttaacatgct gcgtcgggtt gagccatatg ttgcctacgg gtaccctaac ctcaagagtg 300
 tcaggagct gatctacaag agaggttacg gaaagctcaa caagcaaagg atccctctgg 360
 ccaacaacaa agtcacgag gagggtttgg ggaagcacia catcatctgc attgaggacc 420
 ttgtgcacga gatcttgacc g 441

<210> 53
 <211> 457
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E2-B2

<400> 53

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tccgagatcg cgcgactcgt cccgctcacc gccacaaca accactcccg caacaaatcc 120

gtcgtctcca aggtggacta ctacctgcgc ctcttcggct ccttggagga attcctccgg 180

gcattcaagc ataaccacaa tctcctctca cacaacctcg agacggtggg caagcggaat 240

gtcggggttc tgcaggagtg cacgctaggt gcttgcgaca ttgccaagct tgccatctct 300

atgccaaagg tgctcaccgc caacgtggaa caaatccggg ggatggtggc cgggtgctgag 360

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gacagcgagg acaagatcgc cgccaaaatg gaataca 457

<210> 54

<211> 404

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E2-B3

<400> 54

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tgccgcgctc tccaccccaa gattgcgcag ttcgctgagc ggaatccgga cgtgctgttc 120

ctgcaagtca actacgagaa gcacaagtcc atgtgctaca gcctccatgt ccatgtcctc 180

cctttcttca ggttctacag gggagctcag ggcagggtca gcagcttcag ctgcaccaat 240

gcaaccatca agaagttcaa ggacgccctc gcaaagcact cgccggacag gtgcagcctc 300

ggcccgccac gggggctcga ggaggcggag ctcttggttc tggctgcaaa cagggacctg 360

aaattcacct acaacgaaaa gccgacgctg gtgccgatcg ccga 404

<210> 55

<211> 453

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E2-B5

<400> 55

gtaccggtcc agaattcccg ggtcgacggg tgattgacat gtacattagg gactgactcc 60
tgtctgcaaa tgttcagtgg tggtagatat ggtaaagtgt aagttatgaa agacaccact 120
gttggcataa aatcctatgc aggtattgct gcggagggtg tcggaaacgg agcgctcttg 180
atggcaatga attaccatgt caatacatcc aatagcgctt tgtgggatta catgccaatg 240
gttttccaca tctgaccttc tccgaaatth ttgcaccgta cttccgcat gttaggccgc 300
gtttcatctt ttgcttggtt tgatagtatt tcaacccttt ttgtgggaaa agctgatatt 360
ggttagatgt tgggtataga agagccatag agggaaaccta acaacgacat tttcggcagc 420
acggtccatt ctttgcata tgcctgccc ttt 453

<210> 56

<211> 348

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-B6

<400> 56

gtaccggtcc agaattcccg ggtcgacggg agatccgtat cctctggagc ctacctttac 60
atacatgtag ccgtggcgat cgcagttttg cgaaacgtgc tgttgagta gtgaaatctg 120
tccgtcgctt gccattgttg cctgtgcaa gcatcatgct attatgaaca ttcgtaggat 180
gtacgtatct cactaagcat gttctgtact actgtcactc ttgaattcat tgcccatcac 240
ggtcggccgt ccaaggcgat caaagctaataaaccttgt acgagatata agatcgcacc 300
attgagtcgt caatattcag atctgtgacg atcatcttac atagtcca 348

<210> 57

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-B7

<400> 57

gtaccggtcc agaattcccg ggtcgacggg caggattgac gagtgggagc tggaactgtc 60
aagctttggc ctcaagtttg agagaacttc aactatccaa agcagagcat tggcagaatt 120

catagcagag tggacgcaa caccagatga agaaattcca gagacgagca tccccgtcaa 180
agaggcaagc aaagagtggc tgatgtactt tgatgggtgcc ttctcgctgc aaggcgccgg 240
tgcgggcggtg ctgcttgctg cgcccaccgg agagcacctc aagtacgtag tccagatgca 300
ctttccaag gagcaagcaa ccaacaatac tgcagagtat gaaggattgc ttgccggtct 360
cagaatcgca gcagaccttg ggatcaagaa gtcattgtc aggggtgact cacagcttgt 420
cgctcgcaa gtgaacaaga actacc 446

<210> 58
<211> 458
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-001-Q1-E2-B8
<400> 58

gtaccgggtcc agaattcccg ggtcgacggg aacacaggag aagcaaagag atcactggcc 60
cgctttcatg aaattcaagg aatcggaatt agctcaggaa cggtcgagaa taaacaagat 120
caatgccgcg aaaaaggagc attaccataa gctggggcta ggtgtctacg tgggtggccc 180
gcctaagtgg gataaggctg agcaacagat ggtgtatgca ggggtcattc cagttacatt 240
gagctggccc cccgggtcca agacttggtt ctatatgcat gggaggatat tggacccaaa 300
gacaggccag gttttggaga aaggcaagtc ctaaaggagc ccacctcaaa atacttggtg 360
caatagaaga ggctcgaacg gnggtgttca cgcccaacag agagaacgac gagcttatgg 420
gcgccctgng aaatcatgaa cccccgggga agaacacg 458

<210> 59
<211> 410
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-B9
<400> 59

cctgccggta ccggaccaga attcccgggt cgacgggagg aggcctccct actcaccaca 60
gtcaaacggg gttgccgagc gaaaaaacg tactctaact gatttggtta actccatggt 120
agatacgctg ggtttatcca aggcattggt ggggaaggct ataatgacat ccggtcattg 180

cctgaataaa gttccaacaa aggataacga gatcactcct tatgagaagt ggacgaagag 240
aaggacaaca ctctcgtact tacgtacctg gggatgcttg gcgaaagtta atgtgctgat 300
ccccaaaaag cgtaagcttg gaccaaagac tgtggactgt gttaatttgg gctatgctat 360
gaatagtgtt ggctatagat ttctagtagt gaaatctgaa gtacctgaca 410

<210> 60
<211> 450
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-C10

<400> 60

tgcagtaccg gtccagaatt cccgggtcga cggggaggct gctgatgaag tccaggctcg 60
ccggatgcgg ttttggtctg agccgcctcc gcttgttggc tgctcaccg tccatctcaa 120
ccggccgtga cgctggtgta cacgtgtgct ggtctgtgtt gtgtgctggc ctgctgggtg 180
tgcgcgagtg cgtccttctg tgcattgccg cgcgtagtgg tgaattgtgc gcgagtgcgt 240
ccttcacgcg gaagaagtgt gtcctcaatg caccctcagt ttactagcgt gcgggggtgct 300
accccgagtg gtttcaactt tgtttacttc accgcatgtc aaatgggcct ctagtttact 360
tatttttcac ccactccac atggggccagc acacgaagat agagaacacg agctgacaag 420
gcagcatgtg gactgtgagc gtataaaca 450

<210> 61
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-C11

<400> 61

cgctgcccgg taccggaccg aaattcccgg gtcgacgggt gttctctttg atgagattga 60
aaaggcacat ccagatgtct tcaacatgat gcttcagatc ttagaagatg ggaggctgac 120
agatagcaag ggacggacag ttgacttcaa gaacactctg ctgatcatga catcgaatgt 180
cggaagcagt gtcacgaga agggaggccg gaagattggg tttgaccttg actctgacga 240
gaaagatacc agctataaca ggatcaagag cttggtgacc gaggagtga agcagtattt 300

ccggccagag ttcttgaaca gattggatga gatgatttg ttccggcagc tgacaaagct 360
ggaagtgaaa gaaatcgctg atattatgct caaagagggtg tttgacaggc tc 412

<210> 62
<211> 437
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-001-Q1-E2-C2

<400> 62

taccgtgtcc gaaactccc ggtcgacggg aagtcgtcgc agtgacgccg gatcacagcg 60
tcggcgtgct acatcacaa acgaagagca ccaagtcgtc gaagttgcat cgtagcacca 120
ggtggctccc tgcagcgatg tcggctcgta gcatccggcg tgatgcatca caacagcagg 180
agcaccaagt catcgaagtt gcatcgtaac accagggtggc tccctgcagc atcgcgccctc 240
gacctcccta ttctgccgtg ttgcagcacc gacgatgagc ggcggcggcc accggcaacc 300
acgccttcgt gctgtgttgc agcactgatg ggttggtggc ccacctatgg cctcncctctt 360
cttgctccgt tgcagtgttg acgttgagcg gcggctctctt cgggcctcct cttcttgctg 420
cgttgccgtg ctgacgt 437

<210> 63
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-C4

<400> 63

gtaccgtgtc ctaaactccc gggtcgacgg ggaccgaagc gcaaaaagaa actcgaagca 60
caggaacagg aagcaagctg ccccccccc tctcatctc cgactcactc acgatccgag 120
atcaggatgg ccggatcgat ggaactccct accaagggcg gcttcagctt cgacctgtgc 180
cgcaggaacg ccatgctgga gaagaatggc ctcaagatgc ccgggttcag gaagaccggg 240
actaccatcg tcggcctcgt gtttgccgat ggagttgttc ttggcgcaga cacaagggca 300
accgaggggtc ctatagttgc tgataagaac tgcgagaaaa ttcattttat ggcaccaaac 360

atatatgtgt ggtgtgtgtg aactgtgtgt gacacagagg ctgtgacaga tatgggtcagc 420
tcccagctac aacttcaccg ttatgtact a 451

<210> 64
<211> 299
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-C5

<400> 64

tacgcatgac ggtaccggtc ctacattccc ggtcgacgg ggaccacaaa gtgaaaaaag 60
acaagaagaa ggaggagcac aaaaagcggc gacgcaatt gaccgacaga ccgggagcat 120
cgcatcgaat gagcactcaa cgatgtccct cggaagaaa taaccggaag catcaccgcc 180
atggccggcg tcatgcgag aatgaaggag acgctccaga taggtggcag cagcgacgag 240
tccaagacgg acaaggagca caggacaggc ggaggaacac aggacgaagg acggggagc 299

<210> 65
<211> 466
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-C8

<400> 65

gtaccggtcc agaattcccc ggtcgacggg gatgttctgg ctggcatgaa gcaaggggat 60
ctaattcattt ggtatgttga gcagcagaat gcccaagggtg catatagttc tacagaagag 120
gtgaaggagg aagtaaagtg catcaaagcc attatagaga ggctgataca gagggaaggc 180
catctttagt tcatagacga aggaacagcg gcagcagaag gtgctgcagc aagggcatcg 240
gagcacagaa tcctggctgt taacccgaac tacgtcattg attgattaac cagctgagga 300
cacagctaac tagatccatc atatgtggtt gaccaataga gcagacattc aaacggaaga 360
catcctgttg tcatatgctc tagaaatgat atgttgtagc tgccatcccc ttccaagga 420
agcataagat ctctggaatt gtatcttcca tccaagggtg aaatgt 466

<210> 66
<211> 458
<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-001-Q1-E2-C9

<400> 66

tacggacctg aattcccggg tcgacgggaa gctgcagtcc ctgtgtaaac ggttgaactt 60
gcggatgggc ggtgaggccc gtagggagtt gctgtataac atcgaataca gtgccgagta 120
ctgaagcatt tgattttgat gatgccggtg ttctttcaat caagtaggca cgtgtagtgt 180
ttgccggtac tcgaagagca cagaggctgt agtctgtaaa ttatactttg taacagtttt 240
cctaatacatt cttcagtatc ccaggcttcc ttttttcgct ggagagacag gatgagattt 300
tatttgtagg gatttcagaa taaggctcta atacatttgt ttctttgctc aacgcgctat 360
cttcacagtg cagaggatgg atgtaacgtt agttcatcat aatgttatcc ttctgcaaaa 420
taaaaaaaaa nnaaaaaaaaa aaaaaaaaaa agcgggcg 458

<210> 67

<211> 420

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-001-Q1-E2-D11

<400> 67

gtaccggacc agaattcccg ggtcgacggg tgcaaccggt ggtgggagac gcgcaagcag 60
ttcattaaat ctgttatcga tctttgtttc gaacgtcatc tcaaggccag tgatcttctc 120
catggcctct tcaaaattgt tcagcacatc ttgtacctgt tcagtcatca tttgctgaaa 180
cttatcatga agtccttgt tcgataagtt ctcccagtca atctcgtcgg cttgtgatcc 240
tggcattggt agcagcatta gaatcacaca ggaatatgat cctacagact actaagaagt 300
ggtggtggtg tatcacacat ctgtcatgca aatctcaaat tcgtaccagt tcttacccaa 360
cagcacgcgg tgatcggcaa ccgttgtant caacatctcg caatgcttgg atagagcgat 420

<210> 68

<211> 422

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-001-Q1-E2-D12

<400> 68

gtaccggacc agaattcccc ggtagcggg aactcaaatt tcagaaaagc aaaggatagt 60
cgattgttta caccttcggt gtgtcaatgc aacccttctt tgtattgttt agtaaacatt 120
ttgatgtgcc cagtgttgct cgcaaacata ggatagttga ttgaacaagc tcattctagg 180
tttctagtgc attgtttctt gataatagtt gcttttgctt caatgtattt gacagcattt 240
cagtacacac ccctttgggt attgtcgcaa ctttctgtta ataagaagaa agaaccaaga 300
gaatacaaag tgctttgttc taacaaaaaa aagaaaaaat tcaaaaaaaa aaaaaaaac 360
aaacaagaaa caaataagat aactaagtag taacaaaac aaaatagaaa ggggaaacaa 420
aa 422

<210> 69

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-D2

<400> 69

tacgcctgcc ggtaccgtgt cctaggctcc cgggtcgacg ggaagaaga agaagaaga 60
gaggaagaag aagaggaaga agacggaaga gaaagaagct gagacgactg ggcagaagca 120
gacatttgac actactgttg aaaattcagg ggagagcct acagagagag acacggttga 180
cggaaaacag tctagcaagt caaagaagag caaacgtaag cataatgatg gtgcacctgc 240
cgtagagggt tctgctggcg atcaaatcgt gacaaggga gataagaaga gaaggaagga 300
accagttgtg ctggaagcca gcaaccaaac caaaacaca aatgaagggtg agaatagaga 360
gattaagaag agaggaaagg aaagcagtaa agccagtcca gactttagtg agaatgcac 420
tgctggggga gaggaagctg g 441

<210> 70

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-D3

<400>

70

cgctgcagg tacctgtccg aaactcccgg gtcgaaggga attcgagcgg ccgctttttt 60
tttttttttt tttttttttt ttgcccaaag aaacaccatt aatatttcat gaggtaatga 120
aacagggtgt tcccacagaa ccaacacaag ttacaggaag acatgggtctg aacagctgac 180
tattacagaa aaccatccta gcctaggagg aggtgaactt ggtgacagcc ttggtgccct 240
cggagacggc atgcttggcg agctcgccgg ggaggacgag gcggacggag gtctggatct 300
cccgggacgt gatgggtgggc ttcttgttgt acctcgcaag cttggccgac tcgccggcga 360
gcttctcgaa aatgtcggtg atgaaggagt tcatgatgga catggccttg gaggagatgc 420
cgatgtccgg gtgcacctgc ttcagcacct tgaagatgt 459

<210>

71

<211>

480

<212>

DNA

<213>

Triticum aestivum

<223>

Clone ID: LIB103-001-Q1-E2-D4

<400>

71

acgcctgcag taccgtgtcc gaggtccccg ggtcgacagt cccttgaatc tctgcactta 60
aatggagcca ctagtgcccc tcggttagct gaagacgatg aaaattccgt tgctagcgac 120
ttgcattgct ttgagttgaa catgcatgga gatgctgtgc agactcatga ccttgcagga 180
actcgacgaa cagtcgccga ctgcatgtat tcaccaatga gaagactgga gttttccgat 240
ggtgtgtctg ttgaaggctc gaggatctca accgcaaggc ctcgttcaga aaaaggcaag 300
gtgaagccag gcagcagcaa agcacagctg catacttcgg caccagaaat cagctcccgc 360
aactgtgaca ggatcgatcc tatagatgtg cagaatgaaa cagtcatgac ccaagtatct 420
cgacggttgc atgatgacct gctgaagatc aaatcagagg ctcctcagca tgcatttcta 480

<210>

72

<211>

465

<212>

DNA

<213>

Triticum aestivum

<223>

Clone ID: LIB103-001-Q1-E2-D7

<400>

72

gtaccggtcc agaattcccg ggtcgacatg ggtgtagacc acgacctgac taaccacaca 60
aatccctagt ccagggtttat cgcctattca ggttccatcc gtagggagtc cgaccgaggt 120
ttccacatac ggccccgaac gatgtgtata gggtttcgag acaccaaacg ggcgcccgac 180
atacctggcc acgtacctac cgcctcacag cccaccccaa gggtcagcgc tgtgcacggc 240
ctccattata ctacaaacac cttgcaactc ctggacagag gacaaggggtg gttaataagt 300
cgagcgggggt catatttcag ggcccaatgc atggtagtag ctgattctta atcacacata 360
cagatctcag ttcttaggat cggttccaat gaaacaaccc accatgtact cctacatggc 420
ctctcatcga tacctttacc aaatcatggt caacacttaa ctctc 465

<210> 73
<211> 449
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-D8
<400> 73

taccggtcca gaattcccg gtcgacgggg taccgtgga tccactatgc aatagaccac 60
tcgggcagtg ttgccatagg cgacacgcag agccgcact gtcagatggg agagcgccaa 120
cggcctttgg acgatgtcag gaacggggga ccttgaagga tcaggaagag aaacatctga 180
gccaccgtca gactcatcac cgtcggagcc agcgttgtca ggcgcctgaa tagcatggga 240
tcagtccatc atcgcccgca gtttcacttc acttcagttc agctcagcat actagggaga 300
ccacggggaa tgtgagagta ctgacatatg acccaatcgc gacaaagcct tgtgctgcaa 360
caactgtggc tagggataag agttcctcgg ctgcaacttc caataactaa gctcgcgtaa 420
aagtattagt tagcgggtct tggttgaat 449

<210> 74
<211> 423
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-001-Q1-E2-D9
<400> 74

cggaccgaaa ttcgcggggtc gacgggcagc cattctagtt gcacaacagt atataattta 60

gtctcatctc caaaaaatTT gaggggtTgcc caagagtatc tttagcaccc tcagacttta 120
tacttgca gtagtatcca attaatTggc atcctcgaca attctagttg cacaatactt 180
ttctaactag ttgacatact caagactTTT tctagttgca caagagtatg tatttagttg 240
gcacccTtag catttctagt tgcacagtaa acaaaatact gtgttgTcat cctcaactTT 300
tttaatccag atttctaaag aacaacanaa aaattatgca gtgttaacta atcacctTTT 360
ttcaccttca tgatattgtg caggggggtg agggtaatga agaagataat gcagaacgac 420
agt 423

<210> 75
<211> 480
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-E1
<400> 75

ctgcaggtac ctgtccgaga ctcccgggtc gaaggggagc agtcccatg tctttaatgg 60
gccagttctt actcaagagg tcaacaatcc caactataca tatagtccaa ctcaaaaggt 120
tgtagaacct aattttgtag ttggggcccc gtcgtccact aggttatctg aagctggtgg 180
tcagttaaat tgtgttgttt taccagattc tcaggctaag aatgggcgtt ttgtaaagat 240
gctggattca atctcggctc cccctgcttt tgcagcagag ttcccaggca aatccttgtc 300
tggtgtgcac cctaacacca tcagcgtgtc taccgaagta atcagcatag gaagcttaac 360
tgttgccttct cgacaaggca agtggtcgtt ccagaaggat gaagacatgg agcttctctt 420
ctccacaggt ttccagcctg ataaccgcat aactgtggg ggctgcaaca cagtgactgc 480

<210> 76
<211> 413
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-E10
<400> 76

gtaccggacc agaattcccg ggTcgacggg gacgcaagcg ccgccgttcg caccctctc 60
cctgtcctca ccgtgcgcat ggagatttga gcactgcgct acgcgattga ggaagcttgc 120

caaatgcttg ttgacacagt ggatgtaacg tgtccagcat gaccaatacc accttactga 180
 caagcaacat tagatgtgca ttttaagcata ccctccacag cgttacacat tacagggaac 240
 gcaacgatag tctttctgct cacgggaagc gtcattatga ccgctatcag tcaggatatc 300
 gtggccagac aaagcctggt ttccacaaga ttgccacgac atcattgaat attgtgctga 360
 agctgcagtg ccatagctgc atgcattacg cgcaacgcgc catcatgagg tgc 413

<210> 77
 <211> 132
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-E12

<400> 77

gcgggtccac gggataccct aaagtgagtc gtattagcat cactatgata gcacagcgcc 60
 aggacatgag ctggttctgc tacaagcatg tgaacacaat gtccaaaaca agcatgttca 120
 tactggtaat ct 132

<210> 78
 <211> 453
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-E2

<400> 78

tcccgggtcg acgggggatt cccatccagc gtacagacta ggcgaccccc gcttcccgtc 60
 ccctctctcc tccacacgcc tgcgtccctc tcccctcgtc cgccgccgcc gccgccacca 120
 tgggcagggg caagttcaag ggcaagccaa ccggccgccg caacttctcc accccggagg 180
 agatcgcttc tggaacttca gggcgtccac gtcatttaa gaagaatgta gctgaagcag 240
 aagaggaaga ggaagaggta gaagaatctg aagaggaaga atccgaagac gacggtgaag 300
 agaagaaaca taaaggaacc gaaggtgtta ttcaaattga aaatccaaac ctggtgaaag 360
 caaagaatat aaaagccaaa gaagctgac ttggaaagac aactgaactc tcgaggcgtg 420
 agagagacga gattgagaaa caaagatctc aag 453

<210> 79
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-E5

<400> 79

gtaccggtcc agaattcccg ggtcgacggg tcatgcatat aggcattcacc actagaaaaa 60
 aagacacatc cgtgacattt tgggccgaac gaattttttt tctgtcatac atatgacact 120
 tctatgacga taattgtgac aaaacccggt atcatcatag atgtggtagg ctctacttct 180
 tatgacaaaa aatcatgaca gaaaatgggc ttttcattct gggcgggctg gagacgcagc 240
 tgcattgacat tctttggggc gtccatgatg gaaaaaccgt ggtagaagcg aggggggagga 300
 aaatttcggg aagtttcccg ttacgggtggg aggtcggagg ccgagcgatg cgcgtttctc 360
 tcgtacacgt acgcgctgtg gtgcgaagcg ttggctctaa ctgaaccgga gcgaagcggt 420
 gggctctaac tgaaccgag cgattgcact gcaggctatg 460

<210> 80
 <211> 463
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-001-Q1-E2-E7

<400> 80

gtaccggtcc agaattcccg ggtcgacggg gtcggcgatt ggggaaggct cgccgggctgg 60
 gcgacagcga gctccgatga gtgcaacgaa tggaagccag gcgtcggctt acaacaatga 120
 ttcgggtgcc tgtggcatga tggagagccg ccgctgaaag ctgagtgatg gggcgagttg 180
 gttgaggcgt caatggcacc tttgctcgtg accgaggatg gcacttgac agctgaagta 240
 agatgcaggc caacttcagc ctccaaggct tccttggcac cctcctctgc cactacgtgc 300
 tcaacaacaa ggtcttcgaa gggttagggc ttagggcaac tcgatggtag ccagtcggag 360
 tttgctaggt tacatatgca agtccttttg aaatctcaaa cttctttgtg gtgatgagct 420
 tctgctcatc ttgattgatt cctctacagn tgaagggtgt gtc 463

<210> 81

<211> 465
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-001-Q1-E2-E8

 <400> 81

gtaccggtcc agaattcccg ggtcgacggg tgccctcgcca aaacctcagt gaagatcatt 60
 ggtgcagaca agtgggtcttt acagcataaa tcaattcctg acaagttgca aagcctgtac 120
 aatgatggct acaagttggt catattcacc aatgagtcaa acattgagcg ctggaagaat 180
 aagcggcagc aagctgttga ctcaaaagtt ggacgccttg acaactttat tgagtgtgtt 240
 aaagtcccta ttcaggtttt cattgcgtgt ggtactggga aaggaaaagg cacaccggat 300
 gatctgtttc gcaaaccaaa ttcaggaatg tgggtggtga tggcagagca tttcaattct 360
 ggaattgcc a tcgacatgga ccaatctttc tatgttggcg atgctgctgg gagagagaat 420
 gatcatagtg acgcagatat agaattcgct aanggccacg gtctg 465

<210> 82
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-001-Q1-E2-F11

 <400> 82

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 ctttttagag cacgacgggtg gttttatttt gaagaaatag atgaactctc atgcttcatt 180
 atattatttt gagagtctta aacaacatgg taatttgctt gggttataaa atttagtcct 240
 aatatgatag gcattccaaga tgggtataat aaaaactttc atataaagtg cattgaatac 300
 tatgagaagt ttgattcctt atgattgttt tgagatatga agatgggtgat attagagtca 360
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<210> 83
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-F2

<400> 83

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cgacagcgac catgccggca ggcagggcag ggttgaccgt ggccatcatg atgtttccaa 120
gggagagcga ggcacccgcc atcgcgtagc taaagaagtc gatgccccgg gagagggttg 180
ccaccgttgc cgggtgtgaaa gggccagatg agttcacttg tgtgttttac agtcttcaga 240
attggagggt gagatgctac agcagtacag ctgcaagttc ccttgcttat ccgtgaggct 300
atatttcaga ggtttgactg tgaccgaatt tattcacaaa gaagctaggc ggtacttgtc 360
agtatgcttg actaacaat agcattatga tctggttttg ttctctatac cttattagtt 420
catggatg 428

<210> 84

<211> 480

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-F3

<400> 84

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tgggccagtt cttactcaag aggtcaacaa tcccaactat acatatagtc caactcaaaa 120
ggtttagaaa cctaattttg tagttggggc cccgtcgtcc actaggttat ctgaagctgg 180
tggtcagtta aattgtgttg ttttaccaga ttctcaggct aagaatgggc gttttgtaaa 240
gatgctggat tcaatctcgg ctccccctgc ttttgagca gagttcccag gcaaactcctt 300
gtctggtgtg caccctaaca ccacagcgt gtctaccgaa gtaatcagca taggaagctt 360
aactgttgct tctcgacaag gcaagtggc gttccagaag gatgaagaca tggagcttct 420
cttctccaca gggttccagc ctgataaccg catacactgt ggtggctgca acacagtgc 480

<210> 85

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-F4

<400> 85

gtacctgtcc gagactcccc ggtcgaaggg cgtcaaggcc aagatctacc gcctcttcgg 60
ccgcgagaag cccgtccacg ccgtcctcgg cggcggcaag cctgctgac ttgttctatg 120
gaggaacaag aagatctcag gaggggtgct tgctggcgct acggccatct ggctgctggt 180
cgagatcatg gagtaccatc tgcacacctt ggtggggccac tgcctcatcc tctccctggc 240
aacctcttc ctctattcca atgtctgcat tttcatccac aagtctcccc cgaacatccc 300
tgaggtagaa attccagagg acatgactgt aaacattgca ctatcactgc ggcatgagat 360
caaccggggc ttcttcacct tgagagagat tggatcatgt cgtgatctga agaaattcct 420
cattgtgac ggagggctct gggttcttct tgttctctgg agctgc 466

<210> 86

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-F5

<400> 86

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aacactgagc atcggctata ggagatccac catggtgaac accgttagac agatgccggg 120
ttttgccaac acaatgaatt atgagggcga tatgcaaata tcgaccatgc gttcttatct 180
caaaagtgct cgggagtcgg ttcaccaaag tgtgaatagc cgaaataagt cagatgtttc 240
ggctgaggat aaattccata gcgttgattt tgatggtacg atcgaagaat atggatgaga 300
cgcctcttgg agtctcctat atgaaaattg tcgtccttgc ctacgggctt tacacttgta 360
ctcccttatt tctactagct tcgcaatagg agatgtgatg ccgctcatga ctcgaggatt 420
tcccttagga acccaggcca tgttctctct ctccagctct ttg 463

<210> 87

<211> 466

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-F6

<400> 87

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 caagggcagg ctgagcaagg aggagattga gaagatggtc caggaggctg agaagtacaa 120
 gtctgaggat gaggagcaca agaagaaggt ggagtcgaag aacgccctgg agaactactc 180
 gtacaacatg cgcaacacca tcaaggatga gaagatcgcc tccaagctgc cggcggacga 240
 caagaagaag atcgaggacg ccattgacgc tgccatccag tggctggaca caaaccagct 300
 cgctgaggcg gatgagttcg aggacaagat gaaggagctg gaggctctgt gcaaccccat 360
 catcgccaag atgtaccaag gtgctgggtgc cgacatggaa ggcggcattg acgatgacac 420
 cccggctgct tccggcgggtg ctggccccaa gatcgaggaa gttgac 466

<210> 88
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E2-F7
 <400> 88

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 ggaagacttg ggtgaagtct ttataatctt gctgtaaaaa acagaaactt ttgcgctcac 180
 gagattagcg gccatttttt actggagagt gattttaggt tgattagttt ttcagaagat 240
 taatagacaa attcctcagg tccaccaatt tatttcagaa tttttggagt tacataagta 300
 tgcgtttgat acagattgct acagactgtt ctgtttttga cagattctgt tttccttggtg 360
 ttgtttgctt attttgatga atctatgagt agtatcgag ggtatgaacc atagataagt 420
 tggaatacag tagatattac acgaatatga atttataatg 460

<210> 89
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E2-G10
 <400> 89

gtaccggacc agaattcccg ggtcgacggg gacctcctga aggtgatgga ccggagcgac 60

ctcaccggcg cgcgtgcagc ggcagatgct gccccgcact tccccctgaa aggacctggc 120
 tgggaggtcg tgggtggctgc cggggggcggg atgctctcag cgctcaccag ctgagccccg 180
 ggcccgtcc agtgaccggc ctgtcaacgg cgaccgacgc cttggtattc tggtgcttcg 240
 gctttgttcg tcgcctgtgt taaggccgat gtttttgtga acatgatgtg gacatgacaa 300
 cggcatccta cccccctaa gtaattatgg acgaccgagg cgttgacgtg tgtactgtac 360
 tgcacccccct agattaggag ctgatcgatc ctttggcgag ctgtgttgtg atgtaactcg 420
 agct 424

<210> 90
 <211> 369
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E2-G11
 <400> 90

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 ctgttcaccg gcgtccgcca cttcaggcac tgagcctaac ctgagtcctg atggtcatat 120
 caccggtcta ctgtcagtc gtcgcccggtg ggaacttgcg gatgtttgtc gcaataagac 180
 agacgcaggt gattctgagt ccaactagga ttagttgtat gacggtggcg aaagcatttt 240
 gccacgtacg caagtgagga cgcctagggtg ttcgtcacat tgctgagcca gcagcggctg 300
 cgtaataaca aggtcggaaa accagggggc atgtactagc taaagtaagc aaaaagtgtg 360
 tttgtattc 369

<210> 91
 <211> 379
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E2-G2
 <400> 91

cgggtcgaca ggtcatcttc atcttcgact tctacttcat cataatcatc cctgccgtac 60
 acatcttctg ggacaacctc actctgatta caacttgcta gaatactcca tgtgttcat 120
 ctacatcttc tgcgcctgat acattttgct ctactgctta acctacatct tttagagcat 180

ggtcgtggcc cacttctgta gaaactgcta ctactcatg cttcacttat actactttga 240
cagtccttta gaacaacatg gcatttgcta cggttataaa attgggtcca gaatgggtacg 300
catccaagtt gggataata aaaactatca taggaagtga attggatgcc atgatcaact 360
tgatacttga taattgtgt 379

<210> 92
<211> 480
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-G4
<400> 92

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tgagtagcat catcctcgac aggggtgatgc agcagccatc agcagcatcg tcaggagggg 120
catgctggat gagctcaaga agaccctggt caggaggagc attcaggtaa gaacagagca 180
acacaaattg tcatgtttct aagggaata gagcatgctt tgtgatatga acaatggctg 240
atttatcggt ttgtaaacct aaactttcca acaaacttgc gagaaattta tattcagatg 300
gcacatggaa atttatattc agatgatatg gctacttcat attagggaga tattttcgag 360
tgagagcat attaagttac catcagtttt cttgacatac caaattgatg ttggaaccgt 420
atgcattggt aatgttaatt aattgccatg gcaaaaatac tttttaataa agtcgccatc 480

<210> 93
<211> 460
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-001-Q1-E2-G5
<400> 93

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gtaagctcca tgcattggca cggcatgcgg ccggtacgta acgtacttag tctgacgacg 120
actactcaat attatgttcc ttcggtaaact actccatata tatctgccgt tcacgttgaa 180
caagtctgcc aagtgccaa taggaatata tatattcttt ccaccaaaaa aaaaaaaaaa 240
aaagaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
 aaaaaataaa aaaaaagcgg gcccccaaa ggtttcaaac ttaatttccc gttcaaggaa 420
 atttaaagcc cttcaaaagg ggcccccaat tttaatttcc 460

<210> 94
 <211> 463
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E2-G6
 <400> 94

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 atacctacct atttatggca tttccatagc tattccgaga tatattttcca tgcaactttc 120
 caccgttccg ttcattcatca tcatgacatg cttacttttt gtcattattgc cattgcatga 180
 tcatgtagtt gacatcgat ttgtggtaaa gccactacgc ataattttta tacatgtcac 240
 tcttgattca ttgcaccatc ccggtacacc gccggaggca ttcatataga gtcacatctt 300
 gttctagttt cgagttgtaa ttcattgtgt gtaatcaata aaagtgtgat gatcatcatt 360
 attagagcat tgccccaaaa gaaaaacaag gaaggctaaa aagaaaaaaa ggaaggccaa 420
 agaaaacaag cggcgcgcta taaaaaaaac aagcggccgc tct 463

<210> 95
 <211> 456
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-001-Q1-E2-G8
 <400> 95

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 gacatgaagc tcagggatga ccttgagagg ctcaagaaga tcaggaacca tcgtgggtctg 120
 cgtcactact ggggtgtgcy tgtccgcygt cagcacacca agactaccgg caggagagga 180
 aagactgttg gtgtctcaa gaagcgataa gctgcttcac aaagattcct catagctttg 240
 ctactactgt gttgggtccat ttccagaatc ttaaggagggt gttcttattt agatgattac 300

cttggatgat gttttgccct agataatggt ttggttctgg aacctttaat atattgtatc 360
 ttgaattctt tgttgaactc gtacaagagt ttgttttggc atgtgcttcc agtgaaaaaa 420
 aaanaaaaaa aaaaaaaaaa aaaagcggcc gctcta 456

<210> 96
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-001-Q1-E2-G9
 <400> 96

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 atttgattga tgacgggaag aaccccgatg agttcaccag ggacgtgttc aacagctgca 120
 tcgccaagaa ccagatcacg aagggcaaga cggatgcttt caagagcctg aggaagcatc 180
 ttcttgagga gctggaagaa gcttttccag atgacgttga agcgtacaga cagatactg 240
 ctacctctgc tgctgagtca aagagggttg ctcagtccca aagtgctttg cctaattggag 300
 atgccaaagt gaaacctgag cattgagaga ataaccaag tgcaaagagc aagatcttgc 360
 tttatatattc ctatagnttt tcttaagaag gcttntgtga acaacaactg atataacctt 420
 gtatgtgctg ctccctcata tgagtgatca ata 453

<210> 97
 <211> 389
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-001-Q1-E2-H10
 <400> 97

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 tgtacacacc ttttgggaga agccacttg attataattt gctagaatac tctatgtgct 120
 tcacttatat cttttgagct tgatagattt tgctctagtg ctttaacttat atcttttaga 180
 gcatggcggt ggctcatttt tgtagaaatt gctagtcact catgcttcac ttatattatt 240
 ttgagagtct tttagaacaa catggtattt gctatgggta taaaattggg cctagaatgg 300
 taggcatcca agttgggtat aataaaaact atcataggaa gtgaattgga tgctatgatc 360

aatttgatac ttgataattg tgttgagat

389

<210> 98
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-H11

<400> 98

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cttcgccggt gcatccaaac cccgtgatat gatacgtct atcacacata aacctcctta 120
tatcttctc aaaacagaca ccatacctac caattatggc atttccacag ccattccgag 180
atatattgcc atgcaacttt ccaccgttcc gtcctatc atcatgacat actttacttt 240
tgtcatattg ccattgcatg atcatgtagt tgacatcgta tttgtggcaa agccaccatg 300
cattatTTTT catacatgtc actcttgatt cattgcacca tcccggtaca acgccggagg 360
cattcatata gagtcatacc ttgttctagt ttcgacttgt aatccttgtg ctgtaatcaa 420
taga 424

<210> 99
<211> 213
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-H12

<400> 99

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atacgatcaa catgaagatg ttcacatgat ttgactagtc cgtctcacgt gatgatcaga 120
cacggcctag ttgactcgga tcatgtttca cttagatgac tggagggatg cctatctaag 180
tgggagttca ttatataatt tgattagatg aac 213

<210> 100
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-H2

<400> 100

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tgcttaggat ggagtccegc atttgctttg agaactgtaa gcgtgtttta cctgacagcg 120
cctgtaattg taggcccttt cgcatactt cacagcttgt tgtcttatga ggtgctgcag 180
ggcagcaggc tggtttatgc cgctcggtc attattatca tttgtaactt gttagagtgc 240
acattaatct caggaggaca tagacataat acttatgctg ctgttggtgt aacgaccttt 300
atgcctctgc cttgtgttgc tattcataaa aaaaaaatta agaaaaaaaa aaaaaaaaaa 360
aaaaaccaac acacacgaga aaaacaaac 389

<210> 101

<211> 485

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-001-Q1-E2-H4

<400> 101

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agtcctcgat gtgaagcatc acaatacact tgataatcct tatgttgatc tggaagaatt 180
aacacggggg ctgtaaccaa aggtttcttc aactcctgaa aactggcttc acattcctca 240
gtccatttga acttggtgtc cttcttttagc aactccgtca caggtttcac aatcttagac 300
aaattctcaa tgaatcttct gtcgtatctt gcgattccaa gagaactcca gatctcccca 360
aatgacgtgg gtgcttccca atttgttaca ctgacaacct tggtaggggtc tactgctatt 420
cttcttcggg atatagatgt ccgaggaatc caacttcctt caacaaaaac tcacatttgc 480
tgaac 485

<210> 102

<211> 444

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-002-Q1-E1-A1

<400> 102

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tgcaccacga tcgaaattac tgcaccggag cctctggtgg tcgaaattac tgcaccggag 120
cctctggtgg tcgaaattac tgcaccggag cctcctcgct acccctgga cgatataaag 180
gagatgaaag aatgtcatct gtattatcct atcggaaca tgtccatgaa ggtagccatc 240
ggcagtgttt taccatgttt acctggagca ctccaccaca acaaccccat tcaagatggc 300
tatgctcgtg tcacgggtgga ggacatagtc caagggtttg aggacctgga gattgacatt 360
gctacacctg aaggggagaa aagacttgga gatgtcaagc gccatttcat tctatggcaa 420
aagaagttta tcaagtttcc aggc 444

<210> 103

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-A10

<400> 103

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gacgggacac ctccgcctct accaagtggg atcagatttc caggttgctc ggtgagattt 120
tacagttttt cgtagtttag atcgagtcgg ttcttcatac ctatagtcca cgaaaaagcc 180
aaccaaaaac attagggtta gttcatccca tccgaaccaa tctgagcctt gcataatctt 240
ttctgtattt gctttgttga atttgcggtt gcacgctcgt gttcagttgc tgggtcttagc 300
gtctagtctt ttggagtttc gagttctgtt cacaagttgt cagccgctcg ccgcaccatc 360
atcatctgcc ctggccatct acgaccagcg ctc 393

<210> 104

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-A11

<400> 104

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ctcttgccac tctttattcc atagtccata aaagctttac ccaaaacttg aaaacttcac 120
aacacaaaac tcaacaggaa atcttataag ctccgttagt gaaagaaaac aaaaccacca 180
cataaggtag agtaatgaac tcattattta tttatttttg tggttaaacct actgtattac 240
aacttcctta tggtttataa actaatttat tagccataga tgcactgaaa taagcaaaca 300
acacacgaaa aacagaatct gtcaaaaaca gaacagtctg tagcaatatg taactaacgc 360
aaacttctgg aactcaaaaa atcctaccaa aataggacgt actggacaat ttgtttattg 420
atcatcatca aaaagaatca atgc 444

<210> 105
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-A12
<400> 105

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catattgtct tttgtatgat catgtagttg acattgtatt tgtggcaagg ccaccttcac 120
aatttttcat acatgtcact cttgattcat tgcgtatccc ggtacaccgc cggaggcatt 180
catatagagt cataccttgt tctagctttg agttgtaaata ccataaaagt gtgatgattt 240
tcattattag agcattgtcc tcgtgaggaa aggatgatga aggctatgat tccccacaa 300
gtcgggatga gacttcagac tttaaaaaa gaaacataag ggaaaaatgt tagtggctca 360
aacatcaaaa agccggcccc ccaaaaggt 389

<210> 106
<211> 459
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-A2
<400> 106

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ctacattaca agaacattgg tgtaaggaat gcttgaacta tataccttgt gagtcgtcaa 120
gacgcctggt gatcaatgca gtatcaccct ctgcaatatc cagctttcgc tgcagttcgg 180

ccacttcgta tttcgggtag ccgcaggagg agaggcagcc tgtgttccaa gttaagtcaa 240
 ggtagtaac tgagcatatc tttttgatcc tccgattgct tccttcggaa ggcaatccga 300
 gtctcagggg ctactgcata tacaacaggt gcattctatc aatatcattc aattggcaaa 360
 actacatcac aaacctcaaa acctcttaga atgctcgaga aaggctcggt caatccgctt 420
 ttcacggata gaaccttttt gaccaccgta gccatcaag 459

<210> 107
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-A4
 <400> 107

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 acgacattgg tgtctgccct aatccacatt aaagctatct cacagcagac gttacgggac 180
 tctcccagtg acacaatcaa tgggaagact ctgtcgtcca ccgctcacac tatcatgcaa 240
 cgcgaatcat ctactcaatt cattaagctg aatgcgtatc acgtccagaa cttgataagc 300
 atcttcaaag gtcacaaatg agtggccaat acttgagtca agggaagcac aatgtcatat 360
 gtagaccacc attatgggaa cttacatgca tatccgtagg agaattgtgc ctctcacgaa 420
 tagtccagaa 430

<210> 108
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-A5
 <400> 108

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 gccggaggct gatgctgcgg cgagcggctg ctgttgattt cattcacgca cgctaataccc 120
 ggacatctat ctatgatcta tctttatctt tgtggaggat ggatgaaaac gtttgctgtt 180
 tgacgaagtg acatetaagc agctcgtttg tgctgctttc ttttgcttgt gttgctgtat 240

atgatatgaa tcagtgggtc agttgatgct cctcatgttg aatcatcaca aaacaaaaca 300
gagtaccttg gcagctatat aatgtacgta ttattaagct ctataaattt actcacgagg 360
aatcaatcta tttgtgctga aaaaaaagaa gaagagaaag aaaaagg 407

<210> 109
<211> 399
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-A8
<400> 109

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ctttcttcag tggccacgtc atattgagag tatgtgacag atgattgaat ttttgcaaat 120
attctccac agactgactt ccttggagga ggcgagaaa ttcattgctac ttagtcgtca 180
taattccgc agggatgtga tttttctgga atcgttcctt gaattctgac caggtaattt 240
cttcatcagc aaaccacatg gctttttcat attcccacca tatggcagca gcaccttcaa 300
gataatgtgt tacatatgga accttatccc cttcatcagt ttgagcaacc tcaagcttct 360
ttcccatagt tctcaaccaa tcatctgcat ccaagggat 399

<210> 110
<211> 427
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-A9
<400> 110

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caatttgatg cttgataatt gttttgagat atggaggtag tgatattaaa gtcattgctag 120
ttgggtgatt atggatttaa agaattgctt tgtaaagtt tgtgattccc gtagcatgca 180
cgtatggtga accgctttgc gatgaagttg gagcacaatt ttattttattg attgtcttca 240
ttatgagtgg cggtcgggga cgagcgatgg tcttttccta ccaatctatc cccctaggag 300
catgcgcgta gtactttgtt ttttgatgac ttctaaattt ttgcaacaag tgcattgattt 360
cttttgacta atgttgagtc catggattat acgcagcctt tcacccttcc agcatggcta 420

gcctctc

427

<210> 111
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-B10

<400> 111

taccggtcca gaattcccgg gacgacggga gagacgaaga attccagtcc ttcgatttca 60
acacggacgt cattgcaaat catggagggtc cgacattggc ccgcgggagt gtttactaat 120
agcgaagtgt tcatgtactc gcttttaagg ccttgcatga atgcaaaatc ctctgacatg 180
aatgaatgtg atgcacctgt atcaaataaa acagatgcag gtactgaatt tacgaggagt 240
gtacccatca cagtagcagg ctggtcctga gcttcattga gatcaacgtg gttggcatga 300
aaatgaccat aagacatgtc attgtttag cgaggctggg tgcttcacg acgagctgcg 360
ggaaggggca attgattcgg gttcggattc tgatagcagt t 401

<210> 112
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-B12

<400> 112

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aagcaggtgc acccgacat cgcatctcc tccaaggcca tgtccatcat gaactccttc 120
atcaacgaca tcttcgagaa gctcgccggc gaggcgcca agctggccag gtacaacaag 180
aagcccacca tcacgtccag ggaaatccag acctccgtcc gcctcgctct ccccggcgag 240
ctcgccaagc acgccgtctc cgagggcacc aaggccgtca ccaagttcac cagcaactag 300
ggttcgctcg cggtgtctct agggttccgt ccccggttc tcttctagta gcttttgtgt 360
cgccgtcggt cgtgcccatg tgtatcgta tacgtagga gcgcgcctgc cttgttaatc 420
gtgtcaggtt tgtatggac 439

<210> 113

<211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-B2

<400> 113

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 attgctcatg agacaaccaa ccttgagact tgggtgcttg atatactgga tagcattgca 120
 tgcattgctt gtgagtttta tttgaagggt atatttaaag ctgtagtgat ggatctcctt 180
 ggtgagccac ctactgtaca gtgccatgtc tatgacaagc tatgcaacac aagcaatcta 240
 gtcaaaatgc tgtcgattct ttttgaagtt tgttactgaa tgaatacctg aaccaaacgg 300
 tcatctgcgt atcatttttg ttgtgaatct tccccttctg ctggaattgg tcctgcttca 360
 gctgggtcca accgaaggga actgcaccaa cagtaccgac gaaagagaac tgaagaaagc 420
 agcagcagca gcaaagatcc cctgtacata ctctca 456

<210> 114
 <211> 462
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-B3

<400> 114

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 actacctctg atgaggatgc ggacatagat gatgaaatga ctagatacca aagttctgat 120
 tcacatgttg tggagaagaa atatacattg acaaaatgca gcgctgaacc tgagaccaat 180
 aaaacaaagc attctagttt gagttatgag gagcaacctg tttcttcggc accaataaga 240
 gcaagcaaaa ctgttgctgt tccagttaac cccatttccg tggaacctcc aaattttgga 300
 acacaaaag atgttcatgt tgtggagaag cggacatca cacccatgaa tgctaattgtt 360
 gcctctccag ctattaatgt caaagaatta ggtcatggag aagtccaaaa ggattcacag 420
 cggtctgcaa catctgtttc tagttcatat agcactgccc at 462

<210> 115
 <211> 370
 <212> DNA

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

THE **WORLD'S** **LARGEST**

[illegible][illegible]

<400> 117

cgctgcccgg tactgggtccg agcttcccgg gtcgacgggt tccctttaca ttcttgcaag 60
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gattgcttga cttgtccaaa gttgcaaaag tctgccaaga actgaaattg ggaaaaggat 180
aagtttttat ttgggtcaagt agtctaata ccccccccc tctagacata ctttcgatcc 240
tacaagtggg atcagagctt tgggtctacat ttgccttgat tttcatacct tttagaagtc 300
atagccttgg tttcacaacc taggagagta tggcgtctag caagggaat taccaccgta 360
gaggtcctta ctttgatggg actaattttg ctagttggaa gcataatatg aaaatgcata 420
ttcttggaaca taaccccatc gtatgggcta ttg 453

<210> 118

<211> 464

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-C3

<400> 118

cgctgcccgg tactgggtcct acattcccgg gtcgacgggg cacgcgcgag gggctctggac 60
tccgaacgga caacggagag aaccgggaga acccgaacgg atgcaagttt tgaaaaacat 120
gcggatgaaa agcagatgat gacatggcaa aatgcaacac gcaagaaaat gacatggcaa 180
caacgacgaa taaccggcag acaccggcg catcgatcc ggggcgttac aacactcctc 240
cactaacaag agatctcgtc ccgagatctt aggaccgaga cggaagggga aaaggaagag 300
gtgaaacaag aatcaagag aagaagcaaa gaatcgagag cactcaagaa gaagagagga 360
acgacgagaa tcttaaagtc acggaacag atagactatg aaacaactcc ggtttgaacg 420
agataagaaa cgaataagac tgaaaggatt taggcagcac tccg 464

<210> 119

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-C9

<400> 119

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 gggaatggaa tacgggatgg tttcaatcca cgagattgtg gtttaaaccg atgaagatct 120
 ttgtcgaata tgggagagtc attatgggtc tccaggtccg gctagtgtt attgattgga 180
 aaggtgtctc gatcttggcc gcatgttctc gaacccgtag ggtcacacac ttaatgttcg 240
 gtaacgttag ggtcgtaatg ggggtattcat aatgggtgagg ccgaatatag ttcagagtct 300
 cgtatggggc ccgaaatac acgaggatct ttagaatggt ccggagatga agattcatat 360
 aaggaaagtg gttttcaggg ttccagaaaa tgtttgggat ttttcagtac tgtacaggga 420
 aggtttcaga aggttccgaa at 442

<210> 120
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-D10
 <400> 120

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 gggcaatcag ggaatgttcc agcaaagaag gcaatgactt ttccatatca cccatatcat 120
 gaattttttg acttcaaaat gtatgatata atggactctg cataagttga taagacatga 180
 taattaaccg caaaaagcat ggggtatggat aacacattga aagtaatacc agagagcaaa 240
 tttaacgctt acaataaagc atgggcacag ataacttatt ggttcatctg ccaactgctta 300
 ttatctacca agaaactaca aatgaaatgt ataactaaat taggaataag aactccataa 360
 aacattggct ttggtctgca aaccattaat ctgattggag atggaaacta aaccaaga 418

<210> 121
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-D11
 <400> 121

taccggccca gaattcccc gtcgacggga atcctgaaca cggaggacgt gtacgaggca 60
 tggggcacat tccgtggaaa atagggttcc ccgagaacga tgacccgtac gggttacagaa 120

gccgaaagag aaagatggat cggaagcag atgttggtgc gcggttggca tcggaatgg 180
atgtgatgaa gaaaaccgtg agtgtagtag tagccgaacg agatgcagct cgggcgcagc 240
atgaagatca tccagcggat ctgagaagcc agcagcggag aagcagtgtg gcttccacgg 300
aggccccacc ggctgggtgca gatgcaccga cgatcgaaat tactgcaccg gagcctctag 360
tggtcgaaat tactgcaccg gagcctctgg tggtcgaaat tactgcaccg gagcctcct 419

<210> 122
<211> 462
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-D2

<400> 122

acgcctgccg gtactgggtc ggacattccc ggtcgacgg gctatataaa ccgaagggtt 60
gtagtccata ggacaacgat cacaacatac aatcatacca taggctagct tctagggttt 120
agcctctctg atctcgtggt agatctactc ttgtactacc catatcatca atattaatca 180
agcaggacgt aggggttttac ctccatcaag agggcccgaa cctgggtaaa acatcgtgtc 240
ccctgcctcc tgttaccatc cggcctagac gcacagttcg ggacccccta cccgagatcc 300
gccgggtttg acaccgacac ccaccatata ctttcctcaa aacagccacc atacctacct 360
attatggcat ttccatagcc attccgagat atattgccat gcaactttcc accattccgt 420
ttgctatgac acgcttcac attgtcatat tgctttgcat ga 462

<210> 123
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-D3

<400> 123

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tcgaataaaa gcaaattaaa ataaagtga gcaaggattt tttgtatttt tggattaata 120
tatccgaaaa taaaagaaaa taaaaataga tcgcaaagac aaatataata aagaagagac 180
cccaggcccc tagatttcac tagtggcttc tctcgagaaa aatatcaaac ggtgggtaaa 240

tgaattactg ttgggcaatt gatagaactt caaataatca tgacgatatc caggcaatca 300
tcattatata ggcatcacgt ccaagattag tagaccgact cctgcctaca tctacttcta 360
ttactccaca catcgccagc tatccagcat gcatttagtg tattaagttc atggagaaac 420
agagtgatgc aaaaagaaca atgacatga 449

<210> 124
<211> 440
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-D7
<400> 124

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acttctggtg atgaacagaa aaaagttggt gaagttctca tgataaactc ccaaagcgga 120
ccaggtttat tattcccca ggtacttatt ctttgaattg tcataccaag ttgttttgga 180
acattgcgct gctggcaaca cagattggta tcccagttag ctccaacgtg ttccttttcc 240
cggcatttat atatttatga atcctctgag acaaattgag atgcacgcag gaatagtgtg 300
tatggttgat gcataaatca cccctaccta aattttggag agcccaagtt tggccaagga 360
ttaaagggaa tggccaaatg accatgggtca tgcaacaaag ttgtcaatca tccaaagaaa 420
gcccaatagt ttggtgttac 440

<210> 125
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-E10
<400> 125

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agcagcactg tctcatagaa atcttgctgt tcctttgtgt ggaacctgta atcaacaaca 120
gttcttcttc ttgtagcata tgggtctatc tctctccatt tccttagtcc agagtccctc 180
ctgatctgca tggtctcagc cacaggatga gcattcattgt ggtctggaat cttggggttg 240
agcttcctca ggaattgtcc ttcattctct tcattcagtag caacttcagg cactggggca 300

ttgttcttct cagcagctgg tatactcctg gtattcctct taggtgcact cttgggcttg 360
gaggctgctt tgggtgcttc tttgggcttt gatgaagcag cccctgtcct gatagcatca 420
accataagcc tctatgcc 438

<210> 126
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-E12

<400> 126

taccggcca gaattcccgg gtcgacgggg gcaagagaag aaggaaatta tagacaatga 60
tctgggtcgc taccgtctct actcgtcgat ggatcgccgg gcggcgaaat cctccagctc 120
cttcttcaat tcttcacaac tttgcttgaa accagccacg gattcctcca cctcctgctc 180
gcgctcgatc cggagcttcc tcaagccacc catcagttcc tcgacgaccg ctttcagtgt 240
catctccgag gtactgtctt gtcctatgcag catcttcag ctggtggcct cctcctcctt 300
ctcggtgact aacttttagga tcttcgcatt gtcacccatg agttgctcga cgaggctagt 360
cgccttgatc accgaggcat cgctgatcct gacgagcttc atcaagccgt caaccagctc 420
ctgctgcg 428

<210> 127
<211> 400
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-E2

<400> 127

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cacacgatgt ggcacgatga agacgccagt tctactgtac aaactgacgg cgaaggctcga 120
acacgccaca tgcacatcgg acctcatcat cgtctcctat gtggctgttg agttgggtcag 180
tgtctctgca caagaccttg tcgataacat tgatcaagac gacgagtggt acgccctgcc 240
agacgaaatc aaggatcttc ttggctcgac gcacaccttc cagggttttcg acaagtacat 300
gaattggagc ttcacggtga ggtcgatcat ggacgatgct agcgtcccag ccccgagctgc 360

atccgctaac caatgctcgg ataacgctga ccctgatggg

400

<210> 128
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-E4

<400> 128

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caaaattgca tgttagggcc cgagtaaagt ttcaccttgt gcggcttgat tttagaagcc 180
cgtgaaaatt tattttggaa tttttggagt ccgtttagta tttcttttta tttttcttcc 240
gagcgggaata ataaaaaaaa cgaaccgact tcggggccgta cccgagcggg acaccgcccg 300
gggtaacctt taaatagcgc cgccccgagc cgccccatcc catcagcccc gcctcgatcc 360
gtgcgcgtca acagagccat caccgtcgcc accgatgatc ccgccgcccg acgttcgtcg 420
cgct 425

<210> 129
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-E9

<400> 129

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tcgctagcta ggcctagctc gcagtgatcg caccatggcg aagcgaacgt acaggagtta 120
gtatgtgcgt ggtgaggtaa tgcggcgagg gcagggccgg cgctgctagc tgctgccggc 180
gcggcagcac gcaggacatg atgcagttaa tggaagaacg aaggggagct acaaccagct 240
aggaagggga gctgcagcca gctaggacat gatgcagtga aggaagacat gcatgcagcg 300
gcagtgaact aaagagctct ggaggcaggc acagaacggg cagcccggcc gggagaagta 360
aagggcggag ggggaacaga caggcacgcc ggccgtcgcg tcggtacttg cagc 414

<210> 130

<211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-F1

<400> 130

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 taagtcattgc ctgtttgggt gtcacctgac ttataagtca tctgagcata cttctcacc 120
 ttgttttttt atgtaaatgt tgtgggactc atgtaaaagg gggtgactta taagtttta 180
 gttgggggtg agcaacttat gacttataag ttgggggtgac ttataagtta ctccctccgt 240
 tcggaattac ttgtctcgga tatggatgta tctagaacta aaatacatgt agatacatc 300
 atttctgcga taagtaattc cgaacggagg gagtaggtcc gtttgacaaa ataagtcact 360
 ttacactttt tcaacttata agttgggtgac ttatttgga ccaaacaggg cctaacatac 420
 actagtaaca tacacgtatt tgtagactat gttactaccg 460

<210> 131
 <211> 300
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-F10

<400> 131

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 ccgaacaggt gagcttaggc caccacgat gatcgtaac cttcagtgcc ttcttaaaca 120
 acggactcaa gcatcattct taaagacgat gacactatgg tcatcacact tatgggacca 180
 atctcagtgt cagaacaggc ggatttcgag tacggatatg tgctcaggac ttccagatca 240
 acgattgcta gatacaagac atatgagttt cacacgcaca atcggggcgat caccagggtac 300

<210> 132
 <211> 362
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-F12

<400> 132

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gacaagggtc tcgggagcct atttgtgtga tgagagcaag cagcgatccg attgtggcat 120
gtgtgctgta cgtgctgttg tattcagccg gccggcgacg agtttgctag cgaggtaacc 180
tacgtcgctg agtacatgcg gtacaggcca gccgaaaaca tgaagtaaga ccgtcagctc 240
cgcttcacg tcttggtcgt ccatcgtcgc atgtcaccga agagtactag caacgtggcc 300
tgagccaaca gatgatatga aggaaatggt ggccatggca cggaaggaac cttggtgcgt 360
ga 362

<210> 133
<211> 447
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-F3
<400> 133

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caacactaga ggtgccacgt ggagcgttta actggtcaac tagtcatgtc atgagcaaatt 120
acagagttgt acggtgagcc cgtgactgta taataaccac taaacgtaaa tggtgaccgt 180
aatgagtgga tcctgaagtc caatgtgcgt atcgtgcttt cgcttcaaatt acaatgatcg 240
tcattgcata tatcgtgaga gaaagatgaa acatgcgtga attttctggg ggcttacttt 300
tagaggacct ggagatagtt ttgtgtgcat acgtgaaagg ggcgtacagg gggatatgca 360
tgagagagaga gatgctcttc gtttctcggt attatgacta actttgtata tagtatatac 420
atatacaaatt tcacagtgcg gaataaa 447

<210> 134
<211> 434
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-F4
<400> 134

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ctcgccggg atcctctggc tgcggagagg ggctgttgaa ctctttcaca gcctttctta 120

gttcctgttt tttaaacagc aaggtaaata attgtggtca agaaggtgag gacgagtaga 180
 gtcgaataac aaataacaat ttaccagct tcgggggttg tacatggcaa atccatcctg 240
 cggtttaatg tggaggaact cctcttcttc tcccttgtag aattcagata gtatcctcgc 300
 caaagatgtg gcggagtctg gacctttgag accgcagcgg gaggcacgtg cttatccatt 360
 gaagtgccac atgggtttcc cttagattga agtgggtgca ctccccttat aatacatatt 420
 gacatgactt caat 434

<210> 135
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-F5

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 gcgttccacc agatcaattt ccactagcgc aaggtaaca catgcagcag aaaatgaggt 120
 gtcaccggtg gccatgacgc agtgggtggc ttggtgatga catccgcctt gccgaactcg 180
 tgggtcttggc ctggttgcat cggaatggaa acctttgaga ggatccctcc gcgctgggtcc 240
 ttgcctcctt agcacaaagg aggaattgt tccctctatg cccattgggtg cccgcctggc 300
 cttggttata atgactcacg tcatcgtgag cctcgtgagg cgggggtacc gcataagaagt 360
 cttcactcct cggtaggcag tctcggggaa ccactcctcg tgagggtcttg gcgtagtccg 420
 cctcgcgagg ccggggggcc ctgcg 445

<210> 136
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-F6

<400> 136
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 taccgtgcat tgccctttct caccttgaga gttggtgcaa acttcgccgg tgcattccaa 120
 ccctgtgata tgatagctc tatcacacat aagcctcctt atatcttctt caaacagcc 180

accataccta cctattatgg cacttccata gctattccga gatgtattgc catgcaactt 240
 tccaccgttc catttattat gacacgcac atcattgtca tattcctttg catgatcatg 300
 tagttgacat cgtatttgtg gcaaagccac cattcataat tttttcatac atggcactct 360
 tgattcatcg caatccatgt acaccgccg aggcattcac atagagtcac attttgttct 420
 aagtatcg 428

<210> 137
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-F8
 <400> 137

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 ggaagatgga tgccaggaag aagagcctga agaggctgta acagcgcacc ccgccgggat 120
 agcgtcgaag tgtggctgtt gtagtagtta ggagattcaa tcccctaccc ttgataagcg 180
 acgccagatt cagcaggtgc acagtgggac cgaatgaata aataaaccca agggacatct 240
 gatgaatctg gtggttgatt ggtagaagta tgctgtagt cagaactgta gtgatgtgag 300
 atgagatgca tgtgagttgc acccctgttg gaataaactc tagtgatgtg caatgacgaa 360
 ctatttggaa gaacaaactg tcgccttttc agaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420
 aagcggccgc tctagagga 439

<210> 138
 <211> 389
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-F9
 <400> 138

tacggtccta aatcccggt cgacggggc ctgtaaacaa aatcccagcc gagaagagga 60
 agatggatgc caggaagaag agcctgaaga ggctgtaaca gcgcaccccg ccgggatagc 120
 gtcgaagtgt ggctgttgta gtagttagga gattcaatcc cctacccttg ataagcgacg 180
 ccagattcag caggtgcaca gtgggaccga atgaataaat aaaccaagg gacatctgat 240

gaatctggtg gttgattggt agaagtatgc ctgtagtcag aactgtagtg atgtgagatg 300
 agatgcatgt gagttgcacc cctgttgga taaactettag tgatgtgcaa tgacgaacta 360
 tttggaagaa caaactgtcg ccttttcag 389

<210> 139
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-G11
 <400> 139

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 gacgggacac ctttgctct atcaagtgg atcagatttc cagggtgctc ggtgagattt 120
 tacagttttt cgtagtttag atcgagtctg tcttcatacc tatagtccac gaaaaagcca 180
 caagaaaaaa ttagggtttag ttcatacat ccgaaccaat ctgagccttg cataatcttt 240
 ttagggtttt gctttgttga atttgcggtt gcatcgctgt gtctagttgc tggctctaga 300
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 atcatcgccc ctgccatcta gcaccaccgc accgaatccg tatccagt 408

<210> 140
 <211> 383
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E1-G4
 <400> 140

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 taagcacgaa gggaatttag acaatgtatg agttgatgag ttactctcat tagaacgtgg 120
 gcactggtag ctaatccgct ctctctcctt ttttcatcg ctctcctcat catctttttc 180
 atccaatgag ctacagttt catcagtttc ctctccata gactcctgca aaatattagt 240
 ctcttcttgg acagcggaga ctctctcaaa agacttacat acacgtacat acaaagaaag 300
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 agtgtcacct aagttcaatt caa 383

<210> 141
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-G6

<400> 141

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 tgatcatgaa gatgaagatg cggcgaggagc agacgacgat ggaccatcga tgggctgggt 180
 gcaggaccct catattcaag agctgcttct caagcagacg gataacgcaa gagctgccgc 240
 ccgagagaaa gccaaagctag atcaactgga gatagacgcg gttactccat tgtatgaagg 300
 atgcaggccg gaggataccc gcctcaaagt aacgctcatg gctctggaga tgaaggtaaa 360
 acacaaaatg accgacgcat gcttcgacga gaacatgtca ttctggcacg aacgtcttcc 420
 caaggggaac aagtgcccg ccagtt 446

<210> 142
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-G7

<400> 142

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 cggcggtccaa ggaggccggc ggcgagggga agcagcgggg caggaagaag ggcagcaagg 120
 ccaagaaggc cgtggagacg tacaagatct acatcttcaa ggtgctcaag caggtgcacc 180
 ccgacgtggg catctctctc aaggccatgt ccatcatgaa ctcttctatc aacgacatct 240
 tcgagaagct cgccggcgag tccgccaagc tggcgaggta caacaagaag cccaccatca 300
 cgtcccggga gatccagacc tccgtccgcc tcgtctctcc cggcgagctc gccaaagcacg 360
 ccgtctccga gggcaccaag gccgtcacca agttcacctc agcctaggct tcacgtcgt 420
 cgttttaacg aatcgatgat g 441

<210> 143

<211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-H1

<400> 143

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 aatttggtgc atgaggtgct cttttaattg ccttccttat gtgtgaaggt cgggatcgca 120
 cgatgggttaa ctctaccaa ccttcccctt aggagcatgt gtagtagtac tttgcttcga 180
 gggcaagtag acttttgcaa taagtatatg agttatttat gactaatgtg agtccatgga 240
 tatacgaca ctcatccttc cactttgcta gcctctatta taccgcgcaa ctttcgccgg 300
 tatcatgcac ccattattta ccttcctcaa aacagtcacc atacctacct attatgacat 360
 ttccatagcc attccgagat atattgccat gcaactttcc accgttccat ttagtatggc 420
 acacttcaac attggcaaat tgctccttgc atgatcat 458

<210> 144
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E1-H10

<400> 144

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 ctctctatgc ttcccacatg ataaaattgc aagaaactgt ttatactatg cattggcctt 180
 tactttgtgt gcatgaattg ttcttttatg acatgctgat gcataggaag agagttagac 240
 tttgttggtg catgatatat gttactttgt gctcactact aaattacaaa tcattgttaa 300
 ttaaaattgg ctttgatata ccttgggatc cgggtgggtt cactacttga gcactatatg 360
 cctagcttaa tggctttaag gaaagcgtg ccaagggaga aaacccggga gttttagaga 420
 gtcatttatt tctgttgagt gc 442

<210> 145
 <211> 259
 <212> DNA

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gctcgagcgc atccttggca gatttgacat ccccgacgaa gtcgaacatc accaacgtga 120
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gtgggtccgc ggagttggca tgcgcgcgat tgcacgctgt caagctcttc tggaagaagc 240
ccaacagccc caagagcctc ccagcgccag cagctccgta cgcggaggcg ggctgggaca 300
cttgagtgat atggccgcaa ggggtgctat ctgatcatgg agtgcgagaa gaccatcgtc 360
ggaaggccgc cagctcagcc ttttagctta tattttagta taattgtatg catatgtagg 420
tcgtgagtgt tctgg 435

<210> 148
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-H6
<400> 148

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ccaaaatgcg aaagccacaa taccgttccc gttccgcccgc gcagagagac gaccataaat 120
aaagcttaca caacatagcc aacaaggaga ccgttcggac ctggggctgc cgccgaggcg 180
cgtgtgccat gcatcacgat tgcccaacaa ctaagattgc agaagccaac atgatgaaag 240
gataatgcag caaagacgca cgatgacgag gtagcgcaga tttgatttgg gaccttatgt 300
tctgccgact gtagggggga cccttcctag atcttgtaa gcttctccgc cttcaccacc 360
gggttggcct tggcgatggc gtccatggcc gcggcgcggt agtcaaactt gcactcgtgc 420
ttgtccgagt aacggtgcgt tgcgc 445

<210> 149
<211> 338
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E1-H7
<400> 149

taccggtcct aaattcccg gtcaacgcct cgcccctcct tgctcaccaa ttctcatctg 60
cgagagccgc taaagagaac gagcggccgc tccggccacc ggctagatct gcagcaccat 120

cactccacca gccacccgc gtgatctacc tgctgtcgcc ggccctctct ccctctgcag 180
 caccaccaac tgagggtgggg ttcaacagct cacattccta catctttgga aatgcatccc 240
 catctaacgc tacacaggca tcctatgtgt gctgagatta ttgaagaatt ccagaaatgc 300
 catgtggatc accccatcag acgattcttt ggtgaatg 338

<210> 150
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-A1
 <400> 150

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 gatcganatt actgcaccgg agcctctggt ggtcgaaatt actgcaccgg agcctctggt 120
 ggtcgaaatt actgcaccgg agcctcctcg ctaccccggtg gacgatataa aggagatgaa 180
 agaatgtcat ctgtattatc ctatcgggaa catgtccatg aaggtagcca tcggcagtgc 240
 ttaccatgt ttacctggag cactccacca caacaacccc attcaagatg gctatgctcg 300
 tgtcacggtg gaggacatag tccaagggtt tgaggacctg gagattgaca ttgctacacc 360
 tgaangggag aaaagacttg gagatgtcaa acgcca 396

<210> 151
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-A2
 <400> 151

cgggtccagaa aaccggggtc gacgggaccc ttttcggcat caggcctaca ttacaagaac 60
 attggtgtaa ggaatgcttg aactatatac cttgtgagtc gtcaagacgc ctgttgatca 120
 atgcagtatc atcctctgca atatccagct ttcgctgcag ttcggccact tcgtatttcg 180
 ggtagccgca ggaggagagg cagcctgtgt tccaagttaa atcaaggtta gtaactgagc 240
 atatcttttt gatcctccga ttgcttcctt cggaaggcaa tccgagtctc aggggctact 300
 gcatatacaa cagggtgcatt ctatcaatat cattcaattg gcaaaactac atcacaaacc 360

tcaaaacctc ttagaaggct cgagaaggcc tcgttcaatc cgcttttcac ggatagaacc 420
 tttttggaca ccgtaaccat c 441

<210> 152
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-A4
 <400> 152

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 ttcgaggggt agtaatagt atcacgcacc catacatcgg cctcctatcc gtgtcagcgt 120
 cagtggcgtc gcccctaacg cacactaaag agatttgga gcggcctgca cgggcctcgc 180
 cgatggccac aatcaagggg aagacgctgt cgtcctcctc cgagactagc aggcagcgt 240
 gatcctccag cgactccagc atggtgaacg ggtagcacgt cttgtacttg atactcttcc 300
 ccaagggcca ttagtgattg ccgcatgcct gcgtcaggtg atgcacaatg tccgccgacg 360
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 ccaggccgtc catgaaac 438

<210> 153
 <211> 366
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-A5
 <400> 153

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 tgatctatct ttatctttgt ggaggatgga tgaaaacgtt tggtgtttga cgaagtgaca 180
 tctaagcagc tcgtttgtgt cgttttcttt tgcttggtgt gctgtatatg atatgaatca 240
 gtgggtcagt tgatgctcct catgttgaat catcacaaaa caaacagag taccttggca 300
 gctatataat gtacgtatta ttaagctcta taaatttact cacgaggaat caatctattt 360

gtgctg

366

<210> 154
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-B10

<400> 154

taccggtcca gaattcccgg gtcgacggga gagacgagga attccagtcc ttcgatttca 60
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agcgaagtgt tcatgtactc gcttttaatg ccttgcatga atgcaaaatc ctctgacatg 180
aatgaatgtg atgcacctgt atcaaataaa acagatgcag gtactgaatt tacgaggagt 240
gtacccatca cagtagcagg ctggtcctga gcttcattga gatcaacgtg gttggcatga 300
aaatgaccat aagacatgtc attggtgtag cgaggctggt tgcttccacg accagctgcg 360
ggaagggcca gttgattctg gttcggattc tgatagcagt tcctggcaag gtgacctggt 420
tggccacact tgtagcacag accatta 447

<210> 155
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-B12

<400> 155

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ggtgcacccg gacatcggca tctcctccaa ggccatgtcc atcatgaact ccttcatcaa 120
cgacatcttc gagaagctcg ccggcgaggc ggccaagctg gccaggtaca acaagaagcc 180
caccatcacg tccagggaaa tccagacctc cgtccgcctc gtctcccccg gcgagctcgc 240
caagcacgcc gtctccgagg gcaccaaggc cgtcaccaag ttcaccagca actaggggtc 300
cgtcgcggtg tctctagggt tccgtccccg tggtctcttc tagtagcttt tgtgtcgccg 360
tcggtcgtgc ccatgtgtat cgttataggt aggtagcgcg cctgctttgt aaatcgtgtc 420
aggttgtgat ggacggcctt gatttca 447

<210> 156
 <211> 460
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-B2

<400> 156

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 ttgctcatga gacaaccaac cttgagactt ggtgtcttga tatactggat agcattgcat 120
 gcattgcttg tgagttttat ttgaagggtta tatttaaagc tgtagtgatg gatctccttg 180
 gtgagccacc tactgtacag tgccatgtct atgacaagct atgcaacaca agcaatctag 240
 tcaaaatgct gtcgattctt tttgaagttt gttactgaat gaatacctga accaaacggt 300
 catctgcgta tcatttttgt tgtgaatctt ccccttctgc tggaattggt cctgcttcag 360
 ctgggtccaa ccgaagggaa ctgcaccaac agtaccgacg aaagagaact gaagaaagca 420
 gcagcagcag caaagatccc ctggtcatat tctcaatttt 460

<210> 157
 <211> 447
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-B3

<400> 157

gggtcgacgg ggaagatgaa atgaatgttg atactacctc tgatgaggat gcggacatag 60
 atgatgaaat gactagatac caaagttctg attcacatgt tgtggagaag aaatatacat 120
 tgacaaaatg cagcgtgaa cctgagacca ataaaacaaa gcattctagt ttgagttatg 180
 aggagcaacc tgtttcttcg gcaccaataa gagcaagcaa aactgttgct gttccagtta 240
 accccatttc cgtggaacct ccaaattttg gaacaccaa agatgttcat gttgtggaga 300
 agccggacat cacacccatg aatgctaag ttgcctctcc agctattaat gtcaaagaat 360
 taggtcatgg agaagtccaa aaggattcac agcgggtctgc aacatctgtt tctagttcat 420
 atagcactgc ncatcccaca gaagatg 447

<210> 158
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-B5

<400> 158

taccgagtc agaattccc ggtcgacgg gatagctagt cgtattgaag actatgcttc 60
 tagcaaccta catcttgac catgtagaag agagtagatg gtaagttcac caagtatcat 120
 cgcatagcat aatcctaccc gatgatcctc cctcatcac cctgtgagag agtgatcacc 180
 ggttgatctt ggcacttgga aggggtgtgt ttattaagta tccagttcta attgtcaaaa 240
 ggtgaaggta caactccggg tcatcctgtt acagagggac acggctattc gaatagataa 300
 acttcctgc aggggtgcac cacatttccc aacacgctcg atccccttg gccggacaca 360
 ccttcttagg tcatgtccgg ccttgaaga tcaacacgtc gcagccctac ctaggcacaa 420
 tagataggtc agcatgctgg tctaaatcct a 451

<210> 159
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-B7

<400> 159

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 gttcagcatg atattctgag aatgcgaaag aacttggtta agttgggtccg tgtaaaggaa 300
 tttgctccag aagcacagtt ccaagacccc tgtgcctcat tcattctccc gaacgtgatt 360
 tgcagctatt gcaacgattg ccgggacctt gacctctgcc gcgactcgac gctgcaaggc 420
 cacga 425

<210> 160
 <211> 87

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-B8
 <400> 160
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 cggacttgcg tacgaccagg caggaag 87

<210> 161
 <211> 97
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-B9
 <400> 161
 cagcactccc tatagttagt cgtagaactc tcgctcggt actgatgctg attgggtctaa 60
 ccacatctag ctgatgacg cttgttgtga tctgcc 97

<210> 162
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-C1
 <400> 162
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 ttccgctgct catatagtct ttgatgctt gcttgaattg tgtaagatt gcttgacttg 120
 tccaaagttg caaaagtctg ccaagaactg aaattgggaa aaggataagt ttttatttgg 180
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 gagctttggt ctacatttgc cttgattttc atacctttta gaagtcatag ccttggtttc 300
 acaacctagg agagtatggc gtctagcaag ggaaattacc accgtagagg tccttacttt 360
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 cccatcgat gggctattgt gtgt 444

<210> 163
 <211> 418

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-002-Q1-E2-C3

 <400> 163

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 caaaatgcaa cacgcaagaa aatgacatgg caacaacgac gaataaccgg cagacacccg 180
 gcgcacgcga tccggggcgt tacaacactc ctccactaac aagagatctc gtcccggagat 240
 cttaggaccg agacggaagg ggaaaaggaa gaggtgaaac aagaaatcaa gagaagaagc 300
 aaagaatcga gagcactcaa gaagaagaga ggaacgacga gaatcttaaa gtcacggaaa 360
 cagatagact atgaaacaac tccggtttga acgagataag aaacgaataa gactgaaa 418

<210> 164
 <211> 461
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-002-Q1-E2-C5

 <400> 164

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 ccgctaaaagg ttcagcttct agcaggagag gatattgttc aggtatcatg tggaggggacc 240
 cattcagttg tgctaaccag tgatggccga atattctctt atgggagggg cgatcatggc 300
 cgtctaggcg acggtaggga ggtgactacg ggtcacccaa tggaagtgcc cataaacttg 360
 ccgccaccga agaccagcac cagctccgaa gggctatggc aagcgaacta cgttgcctgt 420
 ggcggacgac acacactcgc catcgtgaca tggactgata t 461

<210> 165
 <211> 452
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-002-Q1-E2-C6

<400> 165

ggtaccgatc cagaattccc gggtcgacgg ggtagctaac gtaggacaaa ttgctgaga 60
cgaaacaaac cgctatccat tggcaatcaa cgtcgggtgg tcaatcagtg ggagccaaac 120
tggtcatttg tgctgatgca tgtatagcgt ggtctgctat tgctgatgag cccggcctgt 180
gtttctttct ttcgctgtct gtgcgctcgtt ggctttgctc tggagtgggt accagaggat 240
gtcagatgat gatggatgca ccataaagtt ctgcccaatc aaatactagg caccttgta 300
ctgcttcatac ttgcacaaaa acttatcccg ttaccttggtg tcaatatttt ttcacctac 360
caaaactact ttttgcaact tgtagtggtt tttctaaaga agatagtaca atcgtggata 420
aataatgagc caacatgctg agctggcatt tt 452

<210> 166

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-D11

<400> 166

taccggtcca gaattcccgg gtcgacggga atcctgaaca cggaggacgt gtacgaggca 60
tggggcacat tccgtggaaa ataggggtcc ccagaacga tgaccgtac gggtacagaa 120
gccgaaagag aaagatggat cgggaagcag atgttggtgc gcggttgga tcggaatgg 180
atgtgatgaa gaaaaccgtg agtgactag tagccgaacg agatgcagct cgggcgcagc 240
atgaagatca tccagcggat ctcaagacc agcagcggag aagcagtgtg gcttccacgg 300
aggccccacc ggctgggtgca gatgcaccga cgatcgaaat tactgcaccg gagcctctag 360
tggtcgaaat tactgcaccg gagcctctgg tggtcgaaat tactgcaccg gagcctcctc 420
gctaccccggt ggacgatata aaggagatg 449

<210> 167

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-D2

<400> 167

ggtccagaat acccggtcg acgggctata taaaccgaag ggtttagtc cataggacaa 60
 cgatcacaac atacaatcat accataggt agcttctagg gtttagcctc tctgatctcg 120
 tggtagatct actcttgtag taccatata atcaatatta atcaagcagg acgtagggtt 180
 ttacctccat caagagggcc cgaacctggg taaaacatcg tgtccctgc ctctgttac 240
 catccggcct agacgcacag ttcgggaccc cctaccgag atccgccggt tttgacaccg 300
 acaccacca tataccttcc tcaaaacagc caccatacct acctattatg gcatttccat 360
 agccattccg agatatattg ccatgcaact ttccaccatt ccgtttgcta tgacacgctt 420
 catcattgtc atattg 436

<210> 168
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-D7
 <400> 168

taccgatcta gaattcccg gtcgacgggt gcataccatt caggtataga gctgatgaaa 60
 cttctggtga tgaacagaaa aaagttgttg aagttctcat gataaactcc caaagcggac 120
 caggtttatt attccccaag gtacttattc tttgaattgt cataccaagt tgttttggaa 180
 cattgcgctg ctggcaacac agattggtat ccagtttagc tccaacgtgt tccttttccc 240
 ggcatttata tatttatgaa tcctctgaga caaattgaga tgcacgcagg aatagtgtgt 300
 atggttgatg cataaatcac ccctaccta attttgaga gcccaagttt ggccaaggat 360
 taaaggaat ggccaaatga ccatggtcat gcaacaaagt tgtcaatcat ccanagaaag 420
 cccaatagtt tgggtgttacc taattagtc 449

<210> 169
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-D8
 <400> 169

gtaccgatcc agaattcccc ggtagacggg ggcacgccgc ggattcacct cggctgttcg 60
tctccacatt attctctccg gcggcgccga ctcgactctc ggcgaggggc ggagatgtcc 120
tacctactcc cgcacctgca ctccggctgg gcggtggacc aggccatcct cgccgaggag 180
gagcggctgg tcatgatccg ctccggccac gactgggacg agacgtgcat gcagatggac 240
gaggtgctgt caggggtggc tgagaccata aagaactttg cggatgatcta cctcgtcgac 300
atcacggagg ttcttgactt caacaccatg tacgagctgt atgatccgtc aacggtgatg 360
tttcttcttc cgcaacaagc acatcatgat tgatctcggg acgggaaaca acaacaagat 420
caactgggca atgaaagac 439

<210> 170
<211> 387
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E2-E11
<400> 170

taccggtcca gaattccccg gtcgacgggc gcgctacaac ttttggaacc gagccttcac 60
acactgcgca ccagagatta agcagctgtt tgagtcagtc gcaaagtcac gcggtggagg 120
cgctggaaaa gcagtggatg atggctctga tgcagccac taatgtagtt agtttcttgt 180
aaatggtata tggctgcttg tcatggctcg atgggttgac gtgcggttga cttgctcaca 240
gatatttctt ttctagtatc atatagtatt gcgtctcttc tgtaactgga tattgcgtgg 300
tgaaaccctt taacattata cgcttcacag tgaatgcaaa tattagccct ttgggggtact 360
gcccgtaaaa aaaaagaagc gatgggg 387

<210> 171
<211> 376
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E2-E2
<400> 171

ggtccagaat acccgggtcg acggggaccg aatgaactac aagtccacac gatgtggcac 60
gatgaagacg ccagttcact gctacaaact gacggcgaag gtcgaacacg ccacaggcac 120

aacggacctt atcatcttct ccgatgtggc tgatgaattg gtcagtgtct ctactcaaga 180
 ccttgtcgat aacattgatc atgacgacga gtggtacgcc ctgccagacg aaatcgagga 240
 tcttcttggc tcgacgcaca ccttccaggt ttctgacaag tacgtgaatt ggagcttcac 300
 ggtgacgtcg atcatggacg atgctagcgt cccatcccca gctgcatccg ctaaccaatg 360
 ctcggataac gctgac 376

<210> 172
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-E4

<400> 172

ggtccagaat atccgggtcg accggtgact ttcccaaat aaagaaatat tgaggattta 60
 ataaaaaat caaataagat tttatttcgg agttttcggg gttttatttg aatttaggaa 120
 aaacgtgctg ttatcaaat tgcatttagg gcccgagtaa atgttcacct tgtgctggctt 180
 gattttagaa gcccgtagaa atttattttg gaatttttgg agtccgttta gtatttcttt 240
 ttatttttct tccgagcgga ataataaaaa aaacgaaccg acttcggggc gtacccgagc 300
 gggacaccgc ccggggtagc ctttaaataag cgccgccccg agccgccccca tcnatcagc 360
 cccgcctcga tccgtgctcg tcnacagagc catcacctgc ggcaccgatg atcccgccg 419

<210> 173
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-E5

<400> 173

tacctgtcca gaattcccgg gtcgacgggg caggcaatga tgacacgggg caagatgaag 60
 agatgatcga taatggcggc ggggaagagg ccagacatgg cggcgagaa ggggccggac 120
 atggtggagg agaaggggac ggacacggcg gaggagagaa cgacatggac tccacgcagc 180
 agagtctgct ggtactaagt tcaatcgtgc gggaccctca tgttcaagca ttgcttcgca 240
 aggagacgag tactgagaga gctgcttcta gagaggaggc taagctggag caactagtgg 300

tagattcgaa cactccattg tatgatggtt gcaaacctga tgtgacccgc ttgagtttca 360
cgctccaact cgtgaagacg aaggctaaaa ataatggac cgacactagc ctcgatgagc 420
atctc 425

<210> 174
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-E6

<400> 174

ggtaccgggc cagaattccc gggtcgacgg gaatttctag cccatctggc cccgtcggtc 60
cgacttcggc catatgggtc gggtcagct tagtgtagcg cgtcttcacc atagcccagg 120
cttctcttgc accttgetgg caggctaaca tcttcataa ttggaagcgc cgccgtgctc 180
cttgaagcat atccacaagc tccccatgc cattcggcag gaagcttgat ggccacaagg 240
cctgagcaat gccctgcac acctgccgag ctgctcgtg tagttgtgag aggtcttgca 300
gtaaatcgcc tgcagacaag ggcattctct tctcagggcg gcccgtaac attcctgcaa 360
gtaaaattct ttcaatatgc ttcctcgccg agttgtacta cagttcgtct aggcacttaa 420
cataaaaggc ggtgttgaaa cccttttggt cccc 454

<210> 175
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-E9

<400> 175

taccgggtcca gaattcccgg gtcgacgggg tctggggcgc catgattgcc acccagagct 60
tcgctagcta ggcctagctc gcagtgatcg caccatggcg aagcgaacgt acaggagtta 120
gtatgtgctt ggtgaagtaa tgcggcgacg gcagggccgg cgctgctagc tgctgccggc 180
gcggcagcac gcaggacatg atgcagttaa tggaagaacg aaggggagct acaaccagct 240
aggaagggga gctgcagcca gctaggacat gatgcagtga aggaagacat gcatgcagcg 300
gcagtgaact aaagagctct ggaggcaggc acagaagggg cagcccggcc ggaagaagta 360

aagggcggag ggggaacaaa caagcacgcc ggccgtcgcg tccgtacttg cagccactca 420
ccatggctgc atcgggagtc tggacttg 448

<210> 176
<211> 433
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-002-Q1-E2-F1

<400> 176

ggtccagaat acncgggtcg acggggcctt aaaaccagtg acttataagt catgcctggt 60
tggttgtcac ctgacttata agtcatctga gcataccttc tcaccttggt tttttatgta 120
aatgttgtgg gactcatgta aaagggggtg acttataagt ttttaagttgg ggtggagcaa 180
cttatgactt ataagttggg gtgacttata agttactccc tccgttcgga attacttgct 240
tcggatatgg atgtatctag aactaaaata catgtagata cattcatttc tgcgataagt 300
aattccgaac ggagggagta ggtccgtttg acaaaaataag tcacttttac acttttcaac 360
ttataagttg gtgacttatt tggaaccaa cagggcctaa catacactag taacatacac 420
gtattttag act 433

<210> 177
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-F10

<400> 177

taccggtcca gaattcccgg gtcgacgtga tggacgacaa ggcggtcatg atatctgagc 60
cggacaggta agcctgggcc acgactgatg ctcgctaacc ttcggtgcct tctttatcaa 120
cggaatcagg catccttgcg aatggcgatg acactatggt caccacactt atgggatcaa 180
tctcagtgtc agaaccgcg gatttccagt acggtatgtc gctgaggact tccaggttga 240
cggttgctag ttccaagaca tttgagtttc acatccacga ttgggcgatc accaggtacg 300
cgataagtgc gacatgctac cgtaagggtg atcatgtggc taataccagc atggctctac 360

cctcagatga ttaacgctac acccagcaggt ctttccgagt atcttattgt agcacgacca 420
actgggcgac 430

<210> 178
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-F4

<400> 178

gggccagaat acccgggtcg acgaattcca tggatatgtc cggatcttct tcaagtccgg 60
ggtcgagagc tcggccggga tcctctggct gcggagaggg gctgttgaac tctttcacag 120
cctttcttag ttctgtttt ttaaacagca aggtaaataa ttgtgggtcaa gaaggtaagg 180
acgagtagag tcgaataaca aataacaatt taccagctt cgggggttgt acatggcaaa 240
tccatcctgc ggtttaatgt ggaggaactc ctcttcttct cccttgtaga attcagatag 300
tatactcgcc aaagatgtgg cggagtctgg acctttgcga ccgcagcggg aggcacgtc 360
ttatccattg aagtgcaca tgggtttccc ttagattgaa gtggttgac tcccctata 420
atacatattg acatga 436

<210> 179
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-F5

<400> 179

taccgatcca gaattcccg gtcgacatga tctactcaca tgtcttcgag gcgttccacc 60
agatcaattt ccactagcgc aaggtaaca catgcagcag aaaatgaggt gtcaccgggtg 120
gccatgacgc agtgggtggc ttggtgatga catccgcctt gccgaactcg tgggtcttgg 180
ctcgttgcat cggaatggaa acctttgaga ggatccctcc gcgctgggtcc ttgcctcctt 240
agcaciaaagg aggaaattgt tccctctatg ccattgggtg cccgcctggc cttgggtatc 300
atgactcacg tcatcgtgag cctcgtgagg cggggtaccc gcatagaagt cttcactcct 360
cggtaggcag tctcggggaa ccactcctcg tgaggtcttg gcg 403

<210> 180
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-F7

<400> 180

ggtaccgatc cagaattcgc gggtcgacgg gataaaaata tgatagattg gataaataga 60
 tctcgaataa aagcaaatta aaataaagtg cagcaaggta tttttgtatt tttggattaa 120
 tatatccgaa aataaaagaa aataaaaata gatcgcaaag acaaatataa taaagaagag 180
 accccaggcc cgtagatttc actagtggct tctctcgaga aaaatatcaa acggtgggta 240
 aatgaattac tggtgggcaa ttgatagaac ttcaaataat catgacgata tccaggcaat 300
 catcattata taggcatac gtccaagatt agtagaccga ctctgccta catctacttc 360
 tattactcca cacatcgcca gctatccagc atgcatttag tgtattaagt tcatggagaa 420
 acagagtgat gcaaaaagaa caatgacatg at 452

<210> 181
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-F8

<400> 181

gtaccagtcc agaattccc ggtcgacggg ccgcttgcca ccaaaatccc agccgagaag 60
 aggaagatgg atgccaggaa gaagagcctg aagaggctgt aacagcgcac cccgccggga 120
 tagcgtcgaa gtgtggctgt tgtagtagtt aggagattca atcccctacc cttgataagc 180
 gacgccagat tcagcaggtg cacagtggga ccgaatgaat aaataaacc aagggacatc 240
 tgatgaatct ggtggttgat tggtagaagt atgcctgtag tcagaactgt agtgatgtga 300
 gatgagatgc atgtgagttg caccctgtt ggaataaaact ctagtgatgt gcaatgacga 360
 actatattgga agaacaaact gtcgcctttt cagaaaaaan aaagannngc aaaaaaaaaa 420
 aaagcggccg ct 432

<210> 182
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-G6

<400> 182

aattcccggg tgcgacgggac atgatcacga cggatgatgct gtacacagtc atcatgtaga 60
 agatgccgga catgatgatg aggaagatgc gggagcagac gaagggcattg atcatgaaga 120
 tgaagatgcc ggcggagcag acgacgatgg accatcgatg ggctgggtgc aggaccctca 180
 tattcaagag ctgctttctca agcagacgga taacgcaaga gctgccgccc gagagaaagc 240
 caagctagat caactggaga tagacgcggg tactccattg tatgaaggat gcaggccgga 300
 ggatacccg ctc aaagtaa cgctcatggc tctggagatg aaggtaaaac aaaaatgac 360
 cgacgcattg ttcgacgaga acatgtcatt ctggcacgaa cgtcttcca aggggaacaa 420
 gtgcccgcac 429

<210> 183
 <211> 446
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-G7

<400> 183

taccgatcca gaattcgagg gtcgacgggg aagaagcaca aggcggagaa gcgggagccc 60
 gcgtccaagg aggcgggagg cgaggggaag cagcggggca ggaagaaggg cagcaaggcc 120
 aagaaggggc tggagacgta caagatctac atcttcaagg tgctcaagca ggtgcacccc 180
 gacgtgggca tctcctccaa ggccatgtcc atcatgaact ccttcatcaa cgacatcttc 240
 gagaagctcg ccggcgagtc cgccaagctg gcgaggtaca acaagaagcc caccatcacg 300
 tcccgggaga tccagacctc cgtccgctc gtctccccg gcgagctcgc caagcacgcc 360
 gtctccgagg gcaccaaggc cgtcaccaag ttcacatcat cctaggcttc atcgtcgtcg 420
 ttttaacgaa tcgatgatga tgttct 446

<210> 184
 <211> 345

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-G8
 <400> 184
 aattcccggg tgcacggggg cgaggacggt gatgagggtg atgagtacta gagcagatga 60
 gtttgcgacc tgatgtacgt caagcgcc ttcgtctact actatcctgt gatctgcca 120
 agcggcttta tctgttgtct gtctgtttga atgtttgctg tgtggtgttt ggtttacaac 180
 ctgttggtgc gtatgaacct gtggtatgtt tgaacctgct tcgcaccttg gtcaatatgc 240
 atgttatctg gtttgccctac aataaacaaa aaacccaaaa aacacatcaa ggaaaatcta 300
 gaactcagtc cggcatcatc aaaaaaaaaa gcggccgctc tagag 345

<210> 185
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-H1
 <400> 185
 gggtcgacgg gatggtaaaa gttgtgtgac aaatttggtg catgagggtgc tcttttaatt 60
 gccttcctta tgtgtgaagg tcgggatcgc acgatggta actcctacca acccttcccc 120
 taggagcatg tgtagtagta ctttgcttcg agggcaagta gacttttgca ataagtatat 180
 gagttattta tgactaatgt gagtccatgg atatacgcac actcatcctt ccactttgct 240
 agcctctatt ataccgcgca actttcgccg gtatcatgca cccattatgt accttcctca 300
 aaacagtcac catacctacc tattatgaca tttccatagc cattccgaga tatattgcc 360
 tgcaactttc caccgttcca tttattatgg cacacttcat cattgtcata ttgctctttg 420
 catga 425

<210> 186
 <211> 458
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-H10

<400> 186

tgccggtcca gaattcccgg gtcgacggga ccgttacaca tgatgatttt gatgaatata 60
atatgcatgt gcttgatgct cctacttgca attattatga gagaggaact atatctccac 120
ctctctatgc ttcccacatg ataaaattgc aagaaactgt ttatactatg cattggcctt 180
tactttgtgt gcatgaattg ttcttttatg acatgctgat gcatangaag agagttagac 240
tttgttggtg catgatatat gttactttgt gtcactact aaattacaaa tcattgttaa 300
ttaaaattgg ctttgatata ccttgggatc cgggtggatt cactacttga gcactatatg 360
cctagcttaa tggctttaag gaaagcgtg ccaggagac aaccggaag ttttagagag 420
tcatttattt ctgttgagtg ctttcatata atttaaaa 458

<210> 187

<211> 448

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-002-Q1-E2-H12

<400> 187

taccggtcca gaattcccgg gtcgacgggc gacggtgaga ggcgcccaca tcaacctcaa 60
ggtcaagggg cangatggca atgaggtttt ctccgcacg aagagatcca cacagctgaa 120
gaagctgatg aacgcttact gcgaccgtca gtctgtggat ctcaactcca ttgctttcct 180
ttttgatggt cgtaggctcc gtgggtgagca gaccctgat gagcttgaga tggaggaagg 240
cgacgagatc gacgccatgc ttcaccagac cggagggtgc tttcctggcc cttagaagga 300
gcttgctgca gcctggctgt tctatgtcgt atgctacctt tagaactaga gtaaaatgta 360
agaagtgaag gaacttgta ggctatggtt ctgtgccata gcctgagggg ggggtctggag 420
gtgaaacaac atcgagtagc tgttgatg 448

<210> 188

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-002-Q1-E2-H2

<400> 188

cgggtcgacc ggatggtaaa agttgtgtga caaatttggt gcatgagggt ctcttttaat 60
 tgccttcctt atgtgtgaag gtcgggatcg cacgatgggt aactcctacc aacccttccc 120
 ctaggagcat gtgtagtagt actttgcttc gagggcaagt agacttttgc aataagtata 180
 tgagttatth atgactaatg tgagtcctat gatatacgca cactcatcct tccactttgc 240
 tagcctctat tataccgctc aactttcgcc ggtatcatgc acccattatt taccttcctc 300
 aaaacagtca ccatacctac ctattatgac atttccatag ccattccgag atatattgcc 360
 atgcaacttt ccaccgttcc atttattatg gcacaattca tcattgtc 408

<210> 189
 <211> 409
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-002-Q1-E2-H3
 <400> 189

cgggtcgacg ggcaagctca caccaatgag gttagcaagg gcaaaccact agattggggt 60
 tcaggacaac cagtcacaga tgagcatgga cgccttcaga ttataaagaa tgatgacctc 120
 gaagagctcc aagaactcgg ttctggaact tttggaactg tatatcatgg gaaatggagg 180
 ggctctgatg ttgcaataaa aagaatcaat gacagatggt ttgctgggaa gccatctgag 240
 caagaaaaaa tgcggaatga cttctggaat gaagcatcta accttgctga tctgcaccac 300
 cccaatgttg tggcctttta tggcgttggt ctagatgggc ctgggggatc cattgcaacg 360
 gttacagaat acatgggttaa tggctcactt angacggctt tgctgaaga 409

<210> 190
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-002-Q1-E2-H5
 <400> 190

ggtaccgatc cagaattccc gggtcgacgg gtcaacctca atccccgatga tgtgggtggcc 60
 aggctcgagc gcctccttgg cagatttgac atccccgacg aagtcgaaca tcaccaacgt 120

gatattttga ggatgcaggt gatcgatgga atttgcttcc aggccagaga catggaaatg 180
gagtgggttcc gcggagttgg catgcgcgcg attgcacgct gtcaagctct tctggaagaa 240
gccaacagc cccaagagcc tcccagcgcc agcagctccg taggcggagg cgggtcggga 300
cacttggagt gaatggccgc aagggtgcta tgctgatcat ggagtgcgag aagaccatcg 360
tcggaaggcc gccagctcag ccttttagct tatattttag tataattgta tgcatatgta 420
ggtcgtgagt gttctgggcc ttgccgc 447

<210> 191
<211> 416
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E2-H7

<400> 191
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gcggagccgc ctaaagagaa cgagcggccg ctccggccac cggctagatc tgcagcacca 120
tactccacc agccccccc cgtgatctac ctgctgtcgc cggccctctc tccctctgca 180
gcaccaccaa ctgaggtgga gttcaacagc tcacattcct acatcttttg aaatgcatcc 240
ccatctaacc ctacacagge atcctatgtg tgctgagatt attgaagaat tccagaagtg 300
ccatgtggat cccccatca aaaaattctt tggatgaatgc acggatctta agattaagct 360
tgatcgatgc ttccggcagg agaaagctgt gaagagaaag gcaaactttg gagaga 416

<210> 192
<211> 427
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-002-Q1-E2-H8

<400> 192
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ccttttagcag gtgaggacca actttagtca ggataagtgt actagatatt ccccttcaaa 120
atggccaatt gttggcgccc ttccgctca atatttgga ggaggcccag ggcctttgcc 180
tacaaatagg gctagccacc acaagataga aacaaggaa tcctcaccag gaaccagta 240

gagagagcga ctgaactccc cctagtagtt catcgacta gtcaaaaata gaccctcgcc 300
aggctgttct tccttgatt gtcatcatc agcccaagag gcaatccatc actacacaca 360
ctagagtagg gtattacacc acaatggtgg cgcgaaactag tataaactct gtgtctcttg 420
tgctgtt 427

<210> 193
<211> 335
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-003-Q1-E1-B9

<400> 193

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atattcccc aaagggaacc cttattcaca taaccgttac taagggaac tttaccggaa 120
ccaaccttat ccaattccaa aaaggaattt tccaagggtt catccacccc aatgacaaat 180
gcacgttttt cagggaggta tcanaccagc caatatatta ataggggata acctttgtcc 240
taaaatctat gacttcggtc tctcccagat gttttaagaa gaagaaacgg aacgtattgt 300
tgaaaatgtc gccggaacat tcggatatat ggcac 335

<210> 194
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-A2

<400> 194

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tgagaggcga atggcaaata atgtaatgcg agagatgaga gtttatgatg ggtacttggt 120
atgtctcggc ttggcgtaaa tctccccggc aacggcgcca gaaattcttc ctgctacctc 180
ttgaacttgc gttgggtttt cctttgaaga ggaaaagggtg atacagcaaa gtagagtaag 240
tatttcctc atcttttgat aaccaaggta tcaatccagt aggagacaac gcgcaagtca 300
ccgaatacct gcacaaacaa acaccaactt gcaccaaca cgataaaggg gttgtcaatc 360
cgttcatggt tatttgcaaa gtgagatctg atagagatgg ataaacggta aagtaatatt 420

tttggat

427

<210> 195
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-A3

<400> 195

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catctgcata gcatgcctct ctgtaggcat ggctctcccc aagaacaaga agcggcgat 120
cttagcacgc cctcgcttga attgcaccgc ggcttgggtgc atggtcaggc tatcgttgat 180
cttgtgtggg taaagtgtga agactgggcg cactgacggc cccatcgca cctgaacgat 240
gaacgagaag agcttgacga acccctcaag cacgttggcg aacatctgtg attcacagtc 300
gttgccagcc atctacaaaa gtaggcaaaa attctaaacg atcagatcat aaattttatg 360
ctgactgtca gaaaaatgac tacatttgga aaaacatgaa taaactctat catgctaata 419

<210> 196
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-A5

<400> 196

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attgttgtat gagatgatca tgttttgtaa aagttatagc caactagcag gagccttatg 120
gttgtcgctt tattgtatga aatgcaatcg ccatgtaatt gctttacttt atcactaagt 180
ggtagcgata gtcgtataag caatagttgg cgagacgaca acgacgttac gatggagatc 240
aaggtgtcaa gccggtgacg atggagatca tgacggtgct ttggagatgg acgtcaatgg 300
cacaacatta tgatggctat atcatgtcac atagtttgat tgcactctgag atttatctat 360
tatgcatctt attttgccta gtatctgtca cagcactata ataatacatg taattagtgg 420
catttcatcc 430

<210> 197
 <211> 448
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-004-Q1-E1-A6

 <400> 197

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 gctgcttcaa gttctgaagg tcgcctgttc ctgcgtgctt tctgctcaa aggaaagacc 120
 tacaatgttt gaagtgtacc agcttctgag ggctgttggg gagaaatacc atttttagcgc 180
 cgctgatgat gaactggcgc tccgaccaca ggatgcagac tctaagaagc tggatgagct 240
 tattgtggcg aaatagacgg gtctgtctgg tacgttgatg ctgggtgttt gttgtatctt 300
 gtgaatggtc aggttgagat ggtagtaatg tactactact atctggactc cttcgctagc 360
 tagcgaaacc atcggaagct caatcaatgt tcatggctct ggaaatagca tgttgttgta 420
 agatgtgtat gacttgtgag ttccacgt 448

<210> 198
 <211> 438
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-004-Q1-E1-A8

 <400> 198

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 cacgtcgccg ggcaggaag gtcagtgttt tttgagtttc accggaccgg caaaacctct 120
 cgggacgagt gcttcgcccc ggcgtgcgat tggacacgag gccgcccgtc tctgttttc 180
 gtccaaagga gaagaaaca caaattacgc cctgcctctg attgtgaccg gggatgcatg 240
 aaactatcaa catctctttc tttctttttt ttgtcttttg aaatgatcaa catctcactt 300
 ttgacatggt caaaaaaaaa acatctcact tttgacacgt tgtgagctat atcaccagtc 360
 ctgagttgaa aaacaaggag aacttgcagg taggaatatg gatgataatt tttgactcaa 420
 gtgatatttg caccgggt 438

<210> 199
 <211> 423

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-B10
 <400> 199
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 gtaggcatgt ttagatgctc tatgcactca ctacagatca tgtcatgaca aacgagtcac 120
 acacgcatca agagtacata ccataaaagt tacatatggc actaatcata acatagcatg 180
 cacggctgaa taggagcatc ctcggcaaaa tcgctaaaca tgtcaacatt ctgccaggaa 240
 cattttatag cgacacgtac agctcgattg acacaagtta tggtgctcta tagctgcaaa 300
 cagatacatg tacggataga tgaacacaat attgacagtg cattattact gatcaacatc 360
 agcagatgca cgggtcacga tgatacaaca tgaacatatg gcatcgggtc ggatagttag 420
 gtt 423

<210> 200
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-004-Q1-E1-B11
 <400> 200
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 cgtggttgct cgcgccatcg gcgaggacga cctcctcgag gggtttcgca gcccaggtaa 120
 gtcagaaaga aatattccat cctcggacaa acttctcttg ttgcaatgga atccaagtgc 180
 tttcggttcc tgaagcttgc cggagttggt ttcaaagcaa ggacagagca aggaggccgc 240
 gagttgtttc tgaaactagg ctacagccat gaggtgcagt tcaccgctcc acccgccgctc 300
 cgcgtcttct gcttcaaacc caacataata tgctgcactg gcattgacaa gcatagagtg 360
 caccattttg ccggagccgt ccgaagcagt aaacctccgg aagtgtacaa ggggaanggc 420
 atactgtaca ttgatgaggt cataaagc 448

<210> 201
 <211> 399
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-004-Q1-E1-B2

<400> 201

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tcaattttca cgcaatacat gagcgtgagc catggatata gcactatggg tggaatagaa 180

tataatgatg gggggtttgt ggagaagaca aagaaggaga aagtctcaca tcgatgcggg 240

taatcaatgg gctagggaga tgaccatcaa ttgatgtcca tgcaaggagt agggattgcc 300

atgcaacgga tgcactagag ctataaatgt atgaaagctc aacaaaagca actaagtggg 360

tgtgcatcca acttccttgc tcccgaagac ctagggaat 399

<210> 202

<211> 451

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-004-Q1-E1-B5

<400> 202

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ttatcatcta agccgtcaaa ctggagctct aaatcgcata attgaccgag gcagtcgtgc 120

cataaattac attcttacag tgatggtggt caatgttgtt cccacaatac tagagattgg 180

tatggtgtca agtataacttg cgtaccagtt tggttccact tttgcttgga ttacttcagt 240

ttcagttgct acctacattg ttttcacttt ggctatcaca cagtggcgga ctcaattcag 300

gacagccatg aacaaagctg ataatgcttc tagtacagtg gcagttgact ccctgctcaa 360

ttatgagact gttaaatact tcaacaatga gcaatttgaa gttcagaagt atgataaata 420

cttaaagagt tacgacgatg ctgcactgaa a 451

<210> 203

<211> 437

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-004-Q1-E1-B7

<400> 203

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gaggtctcta aataaggttt ggtggttggc ccaccagta gtggctgaaa gagacgttaa 120
tcgatcatct atgggcgata atactacacg catggacaaa agccgaaatc actaaaaaaaa 180
tttaagcatc agtacatacg caggcgctca tatacacgcg catacactca cccctatgaa 240
cgcacacacg cacaccctac ccttatgagc acctccgaga gactgagccg gcatatcatc 300
ttgagattta cgaagccacc gtagacgcct catcatcgac gagaacgtct cctcccactg 360
aaagcgcatc gccggaaaatc ctgaaataaa tccaggaata atgcgagcac caggatttga 420
aaccctggtg ggttggg 437

<210> 204

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-B8

<400> 204

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tgcggtgag agggctagag ctgcggggcg aggaagctga gcagcgagc ggcatttaca 120
tagcacgtgg aagaagtctg cgaggctggc ttggtcattc gggcttgcta gcgatggcag 180
tgacaagagc gacggcgaga agccctcggt catggcgggg ctacggcgta gagggcgggc 240
gcgaccatgg gagaaggggg agatgatgag ggtgctcaca acggtccga tggcgctcgc 300
ggcgatgtcg gggcggtcg ggttgctgag aatcgacaac gacggctgct ggtggagagg 360
acgaagacaa cagcgatgga agcactactg ggcgctccg catcgtttgc ctcggc 416

<210> 205

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-C6

<400> 205

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tggggtcaag agtggcgctg atggtgaagg taccaccagc gccatcctcc ttggcagaca 120
 ctttcttagt cgcaggtgga gctgccatcg ctttcttgca cttgccggtg gagctcgatg 180
 gtgcgtcctc gacggtagcg cagcactccg aagaggtgca cttgccggag tgggcatcag 240
 agctcttgcc ggacttggtc ttcttccttc ccccgaggc ttcagcggca agtgtcttgc 300
 gctctgctgc ggctgctgct tcccggtaga tcttgctggc acagataaga gcacaccttct 360
 tgtctccagg gacagagatg acacttattg ggcctggcat tttcagtatg ttgtatgcat 420
 actgagaggc tgc 433

<210> 206
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-C8
 <400> 206

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 gacttctttt gtgttcagta tgcagcattc aaagcgacgt catcaatttc caacatgttc 120
 tgacatcatt tgttggtttt tcagtcattt acctaattgt ttagagagct aaatgaccgt 180
 gaaattgaaa atcactacaa aatgaactgt gaaaatgttg aaacctggca tggatatcatc 240
 atttcacccg catagcatgt gcgaaagagt agagagggtc acggcaaaaa ctggacgcac 300
 ttcgtgtaca aactggacaa tctctttcgg agtatcaggg ttttggatca gaacttatct 360
 gttacacggg cacttcaatg ttttttaaac ttatttgaac tccggacttc ttttgtgttc 420
 agtatgcagc attcaaagcg acgtcatc 448

<210> 207
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-D10
 <400> 207

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 ttggagtggg cggtagtacc actcgttctg gacgagcgag gttctcttcc tccttctctt 120

ccatgcttgg ccttggctct tggattctcc atggctcgtct cggttgtgcc ttgtgtccaa 180
 tgggtgtatat tcgaggctct gtcatatgtc ctcttggggc ttggagagta gtacgagtgt 240
 acatggggat gaacgtggga tgctccacat caatcccatc ctccgaggac tttgagttaa 300
 aatcatcaag tgaggaaaac ccaaatccca aaccattca cctacgaacc caaagtgatt 360
 gagcatcact taagagattg ttctgtgtg gaaccgacgc ttgttaactt tgagaactgt 420
 gtatcctcca gaccgttagg catcatg 447

<210> 208
 <211> 413
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-D3
 <400> 208

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 gcattcgacg ctgccgcatt ctaccgagct caagagggca gctcggtaga gagtgtgttc 180
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 gtcgagctcc acaaggcggc cgaacaggcc gtaaattggc ttctagtctg gctgtggcct 300
 gtggaggccg tgcttgggag ctacttcggg cttgtgcggc cgctggtgga ggctgtcca 360
 cggcttgagg tcatcaagcg ctctacctgc atcgagggtg cccggagggg cct 413

<210> 209
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-D5
 <400> 209

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 attctatgtc cacaatgctt tgcacggagc tagtctagct aattgctcca actttcacta 120
 tgtaaccaga ttgagactta gagtcatctg gattggtgta aaagcttgca tcattgtaac 180
 tgtttacgac gggctctttt atcacctcca taatcgagaa acatctcctt agtcctcact 240

aaggatattc ttgacccatg tccagtgatc cacttattat atcaaaaattg tattcctttg 300
 ccaaatacag agcacggtct acaatacgtc aggttcacag catagcatatc tttagagaac 360
 ctatgactga gggatatgac agaagagatg ttgtaccagg ttatgagcgg gcgctccaaa 420
 ggatccaaac tta 433

<210> 210
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-D8
 <400> 210

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 gacatcgga tctctctcaa ggccatgtcc atcatgaaac tccttcatca aggacatctt 180
 caaaaagctc cccggcaagg ccgccaagct ggcgcggtac accaggaagc cagccatcac 240
 gtcccgggag atccagacct ccgtcggcct cgtcttcccc ggcaacctcg caaagcacgc 300
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 tgtgtctcgt agttagctgt tcgggtgtgt atgtgg 396

<210> 211
 <211> 469
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-E10
 <400> 211

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 caatgaagta ggggtggggcg gtgcggcctg tgcggcagca cagccggcca tgggaggcgg 120
 gagcaggcag tcccaccgga gctggtttgg gcggctggag taagaagatc agatattgaa 180
 gaagcagcac atccgttaga ttaacatcca acggtcactg ctgctagaat cgtttatgga 240
 ctaagttgac aaagccaaag tacacgtcaa cctagtagac ccacaagtca gcctccaaat 300
 ctgtcccaaa cagcatataa cccgaaattt ctaaccagat tcaaattaat tttaaatcta 360

aatatacctt aatttaaatt caatgaaact taccgcaca aaaacaatga aatttaaatt 420
atcaaaatcc gaaagaaaac agtattttgg aactaattgc ctaattggt 469

<210> 212
<211> 461
<212> DNA
<213> *Triticum aestivum*
<223> Clone ID: LIB103-004-Q1-E1-E11
<400> 212

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ggaaggcccg tactcatctt tgaccaaata agtgcctgtt taatacacgt taaactaact 120
ggaatttggtg cagtgcatt caattagaca gaacaggcaa caaagagtat taactcctaa 180
ctgcaaacat gttcataact acagagtaac agaataagat aatcatctat cagaatatcc 240
attacaggtc caatgttcaa agtctgctta ccgcagctag ttactcttac tcaactgagg 300
caaaatgtca cacacattct gtatgcatgg gacagcttaa ccatcagaac acaaagttaa 360
caagcgtaga acataattgt acatgtctca ctattgaaga ttaaacacaa atttagtgag 420
aaaataggac aaccgttata actaaaatgt tgattttctt t 461

<210> 213
<211> 321
<212> DNA
<213> *Triticum aestivum*
<223> unsure at all n locations
<223> Clone ID: LIB103-004-Q1-E1-E12
<400> 213

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tgctatggtt atgaatatgg tcctagaatg atgagcatcc aagttgtgta taataaaaac 120
tatcatagaa agtgcacaa acattaggat caatttgatg tttgataatt gttttgagat 180
ataaatgtag taatgttaga gtcatactag tgggtaacta tgaaattgag aaatacttgt 240
gttgaagttg gcaagtccca tagcatgcac gtatggtaaa gttgtgtgac anatttgatg 300
catgaggtga tcttttgagt g 321

<210> 214
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-E5

<400> 214

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 cggcccaçgt ccgagtccgt gacagccac gatccgacgt ctcagattgt ggcccagctg 180
 tcaaaaactc tccgttagtg actggcaaaa aaataagcac gtatgtgtga gctcggctcg 240
 ctcattcccg caaccgcag cgtgacgcgc ggcgaggag gagtgcgga gggccttttc 300
 tattctcaag cccaatagc atgtgaaaga caatccttct ccactagcgg ggtgagacta 360
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<210> 215
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-E8

<400> 215

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 tggcatgaca cgtcagggtca gtacattgaa tggacttcca aactcacaac aagtaaaagc 120
 ataatggcaa acaataacat gacaattaag caagttaaat gcaaggctat aatatactac 180
 tcatgaagtg atcatgcttg tgcaatgagt ccctcggact cccttaccat acgggttacc 240
 tcgtaaccaa catcatcaat atggtgatca cctccggatc acgaacgaaa ccaacccttg 300
 ggttccaaca tcaaccatct tcacggtttc aacattatca tcgcataatc agtgtcatct 360
 gtatgacctt attgtgcaaa attaacttat tggtgttgat ccatggtgtg acctactacg 420
 aactgtgtcc gtaaccgtgg acgcg 445

<210> 216
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-E9

<400> 216

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tgaagggtgtt gccagtctag cacttggtgc aaccaactcc tacgacatat ttgactcacc 120
aaatgaagga attggaagat gcttcatggc caaaggctct aaggtaacac accccgagta 180
tggtgatttc aatagtgatg aagatgactt gttagggtgat gatttgcttg gtgacaactc 240
tagtgatgaa tactatgatg aaagaccaat taatcatgct aaaacgagtg acaatgataa 300
tgagaagatt gaggtctctaa ctaaagaact taaaactctt aagttagctc atgacactat 360
cttcgaagat catcgagaac ttttaagagc tcatgagaaa ctacgctttg aaaagctcaa 420
tcttgagca 429

<210> 217

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-F10

<400> 217

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ccaagactgc cccaagggtt gctgctgctc aagcctctaa gctaacagca ccaagagat 120
caactagaaa cataccagca gctgagaaga acaaggccca gtgccttaaa tggaagaaga 180
agaagagccc caagtgtcga gaaaactcaa actaaagatt cctgatgatg atgacaatca 240
tccagttgtt gataatatga agaaaagaaa acatgtagga ctcatattgt ggagacactc 300
agacccttat gctctgagaa gaaggactat tgtggactac atgtttcaca ctaaggaaca 360
acaggacttc tatgagattg tgctcttgga caagaagccc attgtgtgtg acatgaaatg 420
gggtggactgg aaatacattg aaaacaatga agatcacttt cct 463

<210> 218

<211> 447

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-004-Q1-E1-F12

<400> 218

gggccagaat tccccgggtcg acgggaggaa gagaccgagg aggagctagg aactgaatat 60
ctagtgcagc cgcttggccg tgctgaagat gaagagcatt ccagtgactt tgagccggaa 120
gaaaatggtg atggtgctga ggatgaggag attgaggatg atgatgctga ggatggtgag 180
gattctgtca agccgcaatc ctcatcgaag aggaagaggt ctggtgggga ggatgaagat 240
gatgatgacg gtgatgatga tggatgatgat gatgagaagc ctccatcaaa gcgatagtca 300
atttgttctt gctgattcgg gtacctttct gcttgggcca ngaaaggaaa taatcctctg 360
ggagaagatt gttggtaaat gctgtagctt taggacatct gtggtagggtg tagcagctcg 420
aacttgagtc taccatggtt agttgtt 447

<210> 219

<211> 445

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-004-Q1-E1-F5

<400> 219

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cgccagcttg gcctcccgac gtgctctgcc ctgatccacc aaagactggg cattggcacc 120
attgcgcgtt gggatcatgtc cacgggggtt gttacgatgt tgttcagtac ttgaaaccgc 180
tggcgagtcg atgtgcctgc tgtaactccg gcttggacga ggggttgagt gaatccactc 240
acgactataa gaataagccg cttgctgtc caatgctgtt tgaagaagct ctctggccct 300
ccgcgtttca accgccgatg gagactcgcc ttcaagtgtt agagccgcca atcgatatgc 360
cgcaacaatc atattgtcca aagggttgga ataatgactc gacggcgtca aaaactgctg 420
aggcgngta ttattcacac gcgga 445

<210> 220

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-F6

<400> 220
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 agttctattc ttcattatgg acatacggct gtcctaaatg accggacgct gaatgatgga 120
 gacatggctc taatggacat gggagctgaa tataatttct atggctctga catcacatgt 180
 tcatacccca taaatgggaa gttcaacagc aaccaggcaa tagtatacaa tgctgtcctt 240
 aaggctcata atgctgtcat atcacacatg cagcctggat taaaatgggt tgatatgcac 300
 aagctggccg agcagacaat acttgaatct ctcaagaatg aaaagattat ccatggtgat 360
 attgctgata tgatggctcg aaggttgggt gctgtttcca tgcctcatgg tcttgggcac 420
 ttgcttgga tgcacacca 440

<210> 221
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-F7

<400> 221
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 ggtgaggatc tccatctgaa ctatataact caaaaagtct acatgttaga gcaacgctag 120
 cacagttact gtgtgccctc ctccattata agcgtcgata tgggggttgg gtagcgaaaa 180
 tgcagcctaa ccaaatcgtc aaaacaatcg ccgtcgccat acattttgga gcaccctcca 240
 tatttgctc tcaagccttt gtatttgag ttttcggggc ctcttttgga gcaccctcag 300
 tccacgaaaa aagtgcgcga tgaaaatttc aggatgctcc aacccccatg gccacccgcg 360
 ctggacgtgg aacatcacag taagagcttc gcctcaaccc atgcc 405

<210> 222
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-F8

<400> 222
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cagcccagat gatgacctgg ttgtccagct ggtcccttgg cacctccgcc accttgacga 120
 gggcagcggt catgctcttc atctccctct ggagggactc aacgtcctcc ttgacgccct 180
 tctgcagctt gtactcacc accgagcagct cgccgagctt ggggagcaag cttcccatgg 240
 caccggtcac cacctccatg gtggaaccgg tggatcttcg ttctcagtgt atggatcctt 300
 tagctaggaa gcagtgtgt aacacacaag gattggaagt tagaaaagca aaggaaattg 360
 ttctctatcg catgaaatac acaggataag aaatgcatcc actccaacac caaggaaaaa 420
 tagctgctt 429

<210> 223
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-F9
 <400> 223

ttcccggtgc gacgggtagt agtactttgc ttagagggtc aataaacttt tgcaataagt 60
 atatcagttc tttatgacta atgtgagtcc atggattata cgcactctta cctttctgca 120
 attttctagc ctcttcggta tcgtgcattt cccttcctca ccttgagagc cagtgcgaac 180
 ttcactggtg catccaaacc ccgtgatagg atatgctcta tcacccatag gccttattat 240
 aacttcctca aagcaaccac gatattacc tattatggcc tttccatagc cattccgaga 300
 tatactgcc aagcaacttc aacgcttct tatgatggac ttagaattca ttggcaatat 360
 gacttgcatg atcatatagc tgacaaagta cttgtgggtc agtcactgtt catc 414

<210> 224
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-004-Q1-E1-G10
 <400> 224

ttcccggtgc gacggggttc aataactgat gatatttgg gtggttcaat ttacgatcct 60
 tcttactact cttctctctt cgaagatgtt cgaaataatg catgcaatca tcagggtgat 120

aaacatagtg gtggaatga tggcgggtca acatctgcag gccaatctcc acggcttaaa 180
 tcttttggtg gtagatcttt tctttctaata gatgtggatg ctggactaag aaggccgctg 240
 aattcatgct cagtggagac aagttgaaaa tggaacttat ttttgccaac ctgactacct 300
 gagcactctt tgtttggtcc tccttgagtc agtaactctt gttgacttaa catagagatt 360
 tgtacagtgc aaatgttcat ggctcggaac agtggctcac cggtaaaaca agagcagcan 420
 gatagtacaa tg 432

<210> 225
 <211> 383
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-G11

<400> 225
 ggtcaagaat tcccgggtcg acgggaagga taaatcatac agcagcccct ctggccctct 60
 gctaccatca ccgatgtggg attactacag ccctgaggca ggctggaaga tggatgagat 120
 aaagatggcc ccacaagtta gctacagtaa aggaattggc cccagttatt gaagccatat 180
 atattgtatc agattactaa gttacttgca acctagcaga agtgaaatgc ttttgttgaa 240
 agaaccatta gcatggatct aaaaagtatt tatactctatc tagcattcca agtgggctca 300
 tgttttatgt atctactatg tagcatctag tgtgcaagac atgtaatgca aaaaaaaaaa 360
 aaaaaaaaaa aaaaaaaaaata aaa 383

<210> 226
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-004-Q1-E1-G6

<400> 226
 ggtcaaggac tcccgggtcg acggagcagc agaacacgag gattccaaaa cggctggtat 60
 cgaggatgta gttgtaatgg aagatgacaa caccaagtca gctgaataca aggactccaa 120
 aatgggttatt gtagaggatg caaatgcaaa cgaagatgac aaagccaagg cagtagaaca 180
 cgaggattcc aaagcggctg gtattgaata tacagttgca aaggaagatg ccaacaccaa 240

gtcagcagaa cacaaggact ctaaaatggg tattgtagag gatgcagatg caaaggaaga 300
cgacaaagcc aaggcagcag aacacgatga tcacagagca ggtgggtgtg cagcagaacg 360
caaggatcac agaacagggtg gtgtggagga tgcagatgca aatgaagaca ttagcgccaa 420
ggctgaag 428

<210> 227
<211> 430
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-004-Q1-E1-G7
<400> 227

ggtccagaat tcccgggtcg acgggacct ctcaccacat gttcgcgcg aagttcgcg 60
ccgagaccct tgcgcgcgtc atggagatcg ccgactccgt catcctccgt gactaggcg 120
caagtgttcg tggacatgaa cagaacaagg gttgggtgatg tgatgaagaa gcataagctg 180
atccatccat ccatccccctt tgtgggtttct tcagagagga gcaagcaacc agcagcaaac 240
ctacttcgcc ttgttgttcc gtcgggtggcg ccgtgggcga aggggatgct gctgcttgct 300
tagaatcaga gagtgatgtg gtgttgggtg cgaagtgcc cgactgcctc tatectatgt 360
gagtattgtt gtgtttcttg gtgtttttcc tttccacttt gatccgagcg agaggaagtc 420
gttggcacgc 430

<210> 228
<211> 466
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-004-Q1-E1-G9
<400> 228

ggtccagaac tcccgggtcg acgggtgttt attaataatt gacatcttat tttctttctc 60
caagaaatac tcagagggct gtatacaaga tgtattacaa ttatgggtcc gagctaactt 120
atgaggagaa aggatctctt gtcacgctaa taaatgatgt tgagattttt aagaccaatt 180
atcaaattag ccaaaattat agtggataca tgccactagt atacgagttg catgatggca 240
acttcattgc agaaaacatg gtatgatttt gttaactatg gttgcataca ttctttctta 300

gtaaactata ttgctaacta tatatgttac tattatgttc ttcaacagaa gctcgcgatg 360
gagtttttac ctgacatgat gtttaccgaa ggtcatatgc atatggttac cttaagaccg 420
actccgccga cggcttacca tagtgcatac tcgatttctc taaaag 466

<210> 229
<211> 440
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-004-Q1-E1-H11
<400> 229

gggtcgacgg gtcggggcaa ttggactcca tctgatattg attttcttcg atgtaaaaaa 60
catggaaaaa tcaacaaccg tcacttggca ctatgtcaat aggttagtac caaaaaatga 120
tataaaatgg ctataaatga ttgtaaaaca ttcaagggtg ataataaac aacatggaac 180
aataaaagat tatagatacg ttggagacgt atcagcatct ccaagcttaa ctctactcg 240
tctcgagta ggtaagtgat aaaaacagaa ttttttatgt ggaatgctgc gtaacatgctc 300
atattatatt tgttttcttt atagcatgga catttggact tttacttgtt caaagcaata 360
gtctagtttt gagatgataa tttagatact caagtatc aacaagcaac catgtctttc 420
anaatatcaa tgctaaaata 440

<210> 230
<211> 455
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-004-Q1-E1-H6
<400> 230

tcccgggtcg actgtccaga cgacgaagcc atagcagctt ttaggcataa cgtccgagac 60
gaatggctcg ccagacacct cggccaagaa aagccaagaa caatggccgc actaacaagc 120
ctcatgaccc gcttttgtgc aggagaggac agctggttgg gaaggtgcag ccccgagcgc 180
ccaagtacat ccaaaactag ggatggaaac ggaaaaccgc gacgcaacaa ggaccgtcgc 240
cggactaagg aaaaattccg aagagcacgg cagtcaatgc cagattcaaa ggctcacgac 300
aaaatcagac aaaaccgccc ctccaggata acagggacga tccatccaac ttaaataaaa 360

tctctggacag gatattgtcag atacacagta ctcccgggaa gcccgctaac catacccaca 420
gagattgttg gattttcaaa caatccggca gactc 455

<210> 231
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-H7

<400> 231

accggtccag gattcccggg tcgacggggg acaccaaccc acagacaaga ccgccagtcg 60
tgccagcgcc aagccatggc aagaacgccg caacgctact ggacatgccg gacatcccta 120
tggcacagga tccggacatg catatggcac aggatccgga cgatgacgac aacgacgacg 180
gtacatttac caatgtcgat aagtactttg ccgaacatgg atacggtgac gagttctgcg 240
ggcctccttc tcaagaaccc aaccctgaaa aagacgaccg cgatctagct ggtaaggcgg 300
agaaacccaa ttgcaacagg cgtcgtctgg cgttcagttc tcaggagacg cctccagctg 360
ccgccttcac cgagcctcag atagctgagg tgcgaaatat tatcagcccc aacacgct 418

<210> 232
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-004-Q1-E1-H9

<400> 232

ggtccagaat tcccgggtcg acgggggttta cgcaggttgt tatcgtgctg aggatgctat 60
gggaaaacag ggacatgttt gatcttggtta tcagtgatgt gcacatgcca gacatggatg 120
gctttaagct tcttgagctt gatatggacc tcctgtcat cagagtaatg gaatgttaat 180
tggctggtgg cggcatgttc aactatggga aatgatgagc tcctactttt atgccagctc 240
tatgtcgtag gttgaccata ctattgtgag aatctcggcc aggatcattc tttatatcat 300
gttggttcat cttggaattc gtacagccgt ttatcgtcga aggatttact cacagaacac 360
aatcagtgtg attatgcttt tctacacttc tgtccagagc aatggatatg tattttgtat 420
tgtacgacta ccctctaagc cactactcag ccttcag 457

<210> 233
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-A5

<400> 233

tcccgggtcg atgggcgtct tacagtagta tggctgaggc agtgccagct tggtagttag 60
 tactagctga gaaaattcat gatgctggct gggagcataa catttatagg cttagttagct 120
 gtattgggttc tgttgatgta tgggagtttg tgaaggatgt tctatagacc tctgcagctg 180
 ctattctttg tctattaatc tatgtcctct tatagttagt aaagttgagt acttacagta 240
 tgtgtgcgac tacgtccctt gtagtttttag aaacacctga atttttctgt cctgttctgt 300
 taatcctgaa gataaaactc atatgtatat gttgcttaac tataaccgtag cttcagaaac 360
 atattgcata atcaaactgc atgtatctgt gttcttcttc tggtcctgag gataaagatc 420

<210> 234
 <211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-A6

<400> 234

attccgggtc gacgggttca ggtgactacc tcgtagcccg gcctaagtgg tccaagactg 60
 agaatgatct gggtgataaa gggatcgaac cagagacaat taactggcca gaccgttgct 120
 ggacttggtt cttcggggct ggcggaacct tggaccctgt aacaggggaag tgcatttgga 180
 cgaacgatca aatggacata ccagtcagga agcttaagca gtatatcaaa gtagcacagg 240
 aagggacgtt ctttccagac agagagaacg acgagctcac aatggccctc gggaatcctg 300
 atcacccctg acggacacga ggcacgccag gcccattcc gtggaagggtt gggtttccgg 360
 aagcaggcgg ttacaaatcc catgagaaga cgaaaaaagt gcagcaggcc caaatgc 417

<210> 235
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-A8

<400> 235

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gactgtttat gtgcacttta ttttgctaca gtatataata agagctgtaa tgtaatgaag 120
tctcatggga tttactgata atatggttat cgctaaatat gtttgatgtg catcttaacg 180
tctggtaata tatttgatat gaacctagcc tgtttcgaga aactacagag caaagaatga 240
gagatggcaa tgttaaatac taaaaggact ttggatgggt tcactcggct cagtgatatt 300
cactcatggt gtttcgcaa atgaatcagg ggcttatcag tctctcaaac caacttcaca 360
gttcaatttt cacaaattcg gttctttaac ttgatctgcc aaagcatagg cctctgggtga 420
atcagcaaca gtaacttgaa gat 443

<210> 236

<211> 415

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-005-Q1-E1-B12

<400> 236

gggtcaaggg faacttcgga aggaagaagg gccttcctt caacaaaccg aagggtcatg 60
tcccctaaaa gcttccttgc aaggtaaagg aaaggcttct caaatttgta tttgcccttg 120
gaaaaaatct cgtattactg gaggttcttc ttctgtgaa gggtcaccat cttggctttc 180
acctgccggt tcttcacgtc caccttggtg ccgcacaaga cgatcgggat gttctcgcac 240
accctgcaga tgtctctgtg ccagggtggg acgttcttgt angtgagtcg ggaggtgaca 300
tcgaacatga tgattgcaca ctggccatgg atgtagtatc cgtcacggag gccaccgaac 360
ttctctgtgc cggccgtgtc ncagcagtag aacctgatct tgccgtggct cgtct 415

<210> 237

<211> 361

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-005-Q1-E1-B4

<400> 237

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ttcaggccaa gaaggttaac accctcatca ngcctgatgg caagaagaag gcgtacgtga 120
agctgacacc agactacgat gctcttgacg tggccaacaa gatcggcatc atataagcca 180
gagggagggt cctgcagtan gcgcttgtgt cgtggtttct tatgttattg gaattttgta 240
gttgttactt agcaaaaggc cttagtggct ccattgecta ccatatcgct gcacactttc 300
atgaatttga tgcaatcgaa gtgacttgtg ttgatgctaa tttgagcttt gcgtttggtc 360
t 361

<210> 238

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-B5

<400> 238

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tacatctttt gagttatata ctttttgctc tagtgcttca gttatatctt ttagagcacg 120
tcggtggatt tgttttatag aaacctttgt tctcgcacgc gtcacttata ttaatttgag 180
agtccaacag aacatcatgg aaattttctc taattatttg aagcattcta gataaattca 240
atcaaatttt ctttaagatcg tggtgaatac tatgaaaact ttgatactg ataattgttt 300
tgatatatgg agatggatgat attacagtcg tactagttga gtacttgtga atttgagaaa 360
tgcttgtgtt gaactttgtg agtcccgtaa catgcacgta atgtgaaccg tta 413

<210> 239

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-B6

<400> 239

gggtcgacgg ggtcatctaa ccatgggaga cttccagag cctgcgagca atcgggcttg 60
ggtcgccttc agccttcgga acatctatac tctccacct cgtcctcact tctcctactc 120

aaccgggatg gatgccttcc cctctgctgt cgatccatat aaagaacatc cacaggggca 180
 agcacgggag cgattctgag acgtatgaca cagaaggag gtttgaacca gcgaaattcg 240
 atgctatatt cagcaagttt ggcaaaactc ggccaaatgc tttgtcagaa gatgagatta 300
 acgccatgct taaatacaac cgcaatatgt atgatttcct gggctgggcc gcggccaacc 360
 tcgaatggaa gttgctgcac aagggtggcaa aggataac 398

<210> 240
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-005-Q1-E1-B7
 <400> 240

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 gcgccaagca gtacgccgag gagtacgatg cccaggacaa ggagttggtt cagcttaagc 120
 gtgaggcccg gatgaagggt gggttctatg tcagtcctga ggctaagctg ctgtttgttg 180
 tcagaatcag aggtatcaat gccatgcacc caaagaccaa gaagatcttg cagctgttgc 240
 gtttgagaca gatattcaat ggagtgttcc tgaaggtaa caaggccacc atcaacatgc 300
 tccgcagggt cgagccatat gttgcatatg ggtacccgaa cctgaagagt gtgaggaggt 360
 tgatctacaa aagaggttat ggaaagctca acaagcaaag gattcctctg accaacaac 419

<210> 241
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-005-Q1-E1-B8
 <400> 241

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 gctgaaggaa ctgatataga agaagtgtc gagcaagaag catcaagttc cgtgaagcgt 120
 gtggcgatgg atcttccttc cgagagaaat gagcggatg ggcctcctgc gctcatctgc 180
 tggagcgctg ctgcctagta gtagtaacct agatatagat atagtaccta gtataatgta 240

atgcgggaat aaccagacga actgaagtga tgctgcataa tgcagtgcac tgcagccgca 300
gtactagtag cagccagtaa gcacggccat aatagtcgg cgctacagtg tgtgtcagct 360
cgtgcaccgt ggtntgcctt tcgtgtaagc 390

<210> 242
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-C11

<400> 242

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agcttttggc acaaattctg agagctactt atctgacata cgtgaaacag tccgcgaact 120
cttcaatgaa tactgcaacc ctacagatct gccaaagtga gcttcaaata gtgcagcttt 180
ggatgcggat aatgatttat tggaagattg ggatcagcat ctcaatgaac aagcaagttg 240
tcagatatct acagaacttg atgactacct tgaagagggt ctagtcca gaaaggatga 300
gtttgacatt ctaaactggg ggatgaatca taccacaaag tacccaacgc tagcagctat 360
ggcacaggac atattagcta tgccagcttc tgctgtccaa tctgaagcag cattcaacag 420
c 421

<210> 243
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-C12

<400> 243

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aggcagtccc gccgggcgct gtttgaacgg ctggagcacg acgagcacag attgaagaag 120
cacgacggcc gtaagatggc catctaacag tcaactgctt tgctgcaacc ttttttttag 180
gaaagcctca aatctgtggg atacagcata caacccatct gccactagtt ctaatacttt 240
acagcccatt tgctaactat taaagttttt ttggaggcca tatgcttttt gtgaacatta 300
cagcccatat tgtggccacg gttaaataa tatacgaat tttgcatatt tcagtgcagt 360

ccgaactttt tttaatcctg aaatttcgac tcacattcaa actggattta aagatcaatg 420

tt 422

<210> 244

<211> 404

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-005-Q1-E1-C5

<400> 244

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tgaagtactt ctaatttcat acttggttcta ggtaaagcga acgtcaagcg tgcgtacagt 120

tgtatcgggtg gtcgatataa tttgagggaa tatttggttct accttttagct cctcgttgag 180

atcgacactc ttacttctcg atgactattg cgatccccta tacctgtggg ttatcactct 240

ccacatctat tggcgtaagc tgatggacaa aacgacttgt gcggccaacg ccacggggaga 300

atacgacaga agtcgacggg gatgggtctgg ctggcatgaa gcaaggggat ctaatcattt 360

ggtatgttga gcagcagaat gcccaaggcg catatacttc taca 404

<210> 245

<211> 436

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-005-Q1-E1-C8

<400> 245

gggtcgacgg gacaggaaaa gacattattc agaagtggt catcacggat cttagggagg 60

aagtggtagt ttacatcaag ggaacaccgt ttgttttgag agagttagat caacctgttg 120

atacactgaa gcatgtggga ataagtggcc caatggtaga gaacatagag gcaaggctga 180

aggaggatat actttctgaa gttaaacagc tagaaggctcg gctgcttctg catcaagaag 240

aatttaacac agccacaaat caatgcagtg tactagggtta ttgngagcac atagatctgg 300

aggacgtaat gacaccggct gaagtgtaca gcacatttaa gggatcangg ggtattgtat 360

tgactacaaa aggatacctc tgaccaggga aagagaagca ttagctgctg atgttgattc 420

aatacagtca tcaatc

436

<210> 246
<211> 233
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-D2

<400> 246

gggtcgacgg ggtgtgttga ttgcttattt tgatgaatct atggctagta aaatagttta 60
taatccatag aggttggat acattaggtt taacacccat ataaataaat aatgagttca 120
ttatagtacc ttgaagtggc cttttgtttt ctttcgctaa cggagctcac gagttttcta 180
ctttaagttt tgtgttgtga agttttcaag ttttgataa agatttgatg gat 233

<210> 247
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-D4

<400> 247

gggtcgacgg ggtgtctaaa aaaaaaaaaa gcgaaagagg tctactacca tcccagacga 60
ggaggagcag agccaccgca atcgaatccc cttccttctt tcttccgctc cccgacgacg 120
atggagcgcg tgagaagggc gtcgcatgcc ggctcctggc acaccaacaa cgccagcaag 180
ctggaagaag aacttgatgg ttggctttcg gcagctgctc tcaccaagtc acctggagtt 240
aggggcataa ttgcacccca tgctgggtat tcgtactcag ggcgctgtgc agcttatgct 300
tttggcaaca ttgatccaac taacatttct cgggtgtttc tgcccggccc atctcatcac 360
tactatactc caaaatgtgc cctgtcaaga gctactgggt atagcaccac ga 412

<210> 248
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-005-Q1-E1-D6

<400> 248

gggtcgacgg gagaagctaa cactccgact ccaaataac tcaagatgaa ggtgttgccg 60
 gtctagctct tgtgtcaacc aactcctacg acatatttga ctcaccaa at gaaggaattg 120
 gaagatgctt catggccaaa ggtccaaagg taacacatcc cgagtatgtt gatttcaata 180
 gtgatgaaga tgacttgcta ggtgatgatg atttacgtgt tggcaactct agtgatgaat 240
 actatgatga aacgtcaatt aatcatgcaa atcaagataa aacgacagaa cattataagg 300
 aaaaaaatga gattctaact aaagaaacaa acactcctaa gttagctcaa taaactatct 360
 tcgaagatta acgagaactt ttaagggtc atgagaagtt atgcttcgaa aagctc 416

<210> 249
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-005-Q1-E1-D7

<400> 249

attccccggg cgacgggaga agggtagtag ggtacctagg gtttatggcg tctcgttggt 60
 tttgcaagct agcatgtgac tccgggatgc ctgttttaag attaagattt cgcttggtgtt 120
 gagagatatt attatttact gcttgtagcc tacctgggat accatcatat tttgttgatt 180
 atggaacagc ttttatcctg ctttaagctct gtattttgcc cgagttgaaa tggcctgacc 240
 agttgaaatc cttcgggtacc ctagtatggt tacctacctg cattttgaat gaatttctcg 300
 tgtagcgggt tggctttaag ctgttcattt gttttagaaa ttgttaactg gttgcttggt 360
 angggatagt tgtattgtgg ttagtgtaga atacctgttg taggcatgtg taattcctgn 420
 gtgacttgcc tagtatcctg cac 443

<210> 250
 <211> 455
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-005-Q1-E1-D8

<400> 250

gtcaaaaatt cccgggtcga cgggtctatg tacttcacta atatcttttg agcttgataa 60

gtttttgctc tagtgcttca cttatatctt ttagagcacg gtggtgtctg aattttgaag 120
aaattgataa tctctcatgc ttcacttata ttattttaag agtcttttaa aacatcatgg 180
tatttgctat ggtcataaag ttggtcctag aatgatgagc atccaagttg ggtataataa 240
aaactatcat aggaagtga tgggatgcta tgatcaattt gatacttgat aattgttttg 300
agatatggag gtagtgatat taaagtcgtg gtagttgggt gattatgaat tcaaagaatg 360
cttggttga agttagcaag ttncgtaaca tgcacgtttg gttaaaagt gtgtaacana 420
ttttgaaaca tgaagtgtac ctggcttggt catcc 455

<210> 251
<211> 453
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-005-Q1-E1-E10

<400> 251
tgccggtcgt aaattcacgg gtcgacgggg atgcactaaa gctataagt tatgaaagct 60
caaaaagaaa ctaagtgggt gtgcatccaa ctgcttgct cacgaagacc tagggcattt 120
tgaggaagcc catcattgga atatacaagc caagttctat aatgaaagat tcccacaagt 180
atatgtaagt gacaacatag gagactctct aacatgaaga tcatggtgct actttgaagc 240
acaagtgtgg taaaaggaaa gtagcattgc cccttctctc tttttctctc atttttttg 300
ttttttgggg ccttctctct ttttcatgg catattttcc tctttttttt atttctcgtc 360
cggagtctca tcccgactta tgggggaatc atagcctcca tcatcctttc ctcaactggg 420
acaatgctct aataatgatg atcatcacac ttt 453

<210> 252
<211> 408
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-005-Q1-E1-E12

<400> 252
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tatcaagtgg tatcagattt ccaggttgct cggtgagatt ttacagtttt ttgtagttta 120

gatcgagtat gttcttcata cctacagtcc acgaaaaagc cacaagaaaa aattagggtt 180
 agttcatcat atccgaacca atctgagcct ttgcataatc ttttagggt tttgctttgt 240
 tgaatttgcg gttgcatcgt cgtgtctagt tgctggctct agagtctagt ctttttagagt 300
 ttcgagttct ggtcataagt tgtcacgccg ccgccgcacc atcatcatca cccctgccat 360
 ctaccaccac cgcttatccg ccaccgcttc gaatecgtat ctatatac 408

<210> 253
 <211> 168
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-005-Q1-E1-E2
 <400> 253

cggtccacg gcaagaacca aaggacgaga agcggctgcc ggcggggaag tcggccgcca 60
 aggagggcgg cgacaagaag ggcaagaaga aggccaagaa gagcgtggag acgtacaaga 120
 tctacatctt caaggtgctg aagcaggtgc accccgacat cggaatct 168

<210> 254
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-005-Q1-E1-E5
 <400> 254

aattcncggg tcgacgggat atcattatga agttggattg cctgtttctc ttcacataga 60
 aaaccgccat ttgtagaatg ttgtttcgct tcacttatat ttgttagagc gtgggaatat 120
 cttttgtaga aagaattaaa ctctcttgct tcacttatat ctatttagag agatgacagg 180
 aattggatcat tcacatgggt agtcataaaa tctacataa actttagat cgctgaatat 240
 gatatgtttg attccttgca atagttttgc gatataaaga tggatgatatt agagttatgc 300
 tagtgggtga cagtggattg tagagacact tgtgttgagg tttgcaagtc ccatagcatg 360
 cacgtatggg aaccgttggt tgacaaattt gaagcatggg gtgtttcttt gattgtcttc 420
 cttatgagtg gcggtcgggg a 441

<210> 255
 <211> 363
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-005-Q1-E1-E6

 <400> 255

attcncgggt cgacggggaa ttgaaacaca ccacagatgg aacgcaatgg agaaagatcg 60
 acagagagtt caaagatttt gcagctgacg caaggaacat aagatttggg ctaagtacag 120
 atggcatgaa tccttttggc gagcagagct ccagccatag cacctggccc gtgactctat 180
 gcatctacaa ccttcctcct tgggtgtgca tgaaccggaa gttcattatg atgcaattgc 240
 tcatccaagg tccgaagcaa cccggcacca acatcaatgt gtacctaagg ccataatttg 300
 ataaactttt acaccgggtgg ggcaaacttg tggtcgtttt ttggaatgac cacaataaga 360
 agg 363

<210> 256
 <211> 438
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-005-Q1-E1-E7

 <400> 256

ggtaccagtc gagaattccg ggtcgacggg ggcagtaaac agcgaggtcg tccaaggcc 60
 agtccttctc gatcctcggg actcctgatg aagctcgcg cgtccccggt gtcacccggc 120
 ttggccgccc atggaaagcc tttccctagg tcggggaagg agctgaagcg aaagcaagaa 180
 catgatagca caacagcaag tagtgagagt agcaagctaa aacatttcat aacaggaagt 240
 ccagggcacg atgatttgaa tgatagtttt gatgagcaat ttggcttgaa gacttctggg 300
 tctggaaagg agctgaagcg aaagcaagaa catgatagca caacagcaag tagtgagagt 360
 agcaagctaa aacatttcat aataggaagt ccaaggcatg atgatttgaa tgatagtttt 420
 gatgagcaat ttggctac 438

<210> 257
 <211> 432

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-005-Q1-E1-E8
 <400> 257
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 gatggcaatg aggttttctt ccgcatcaag agatccacac agctgaagaa gctgatgaac 120
 gcttactgcy accgtcagtc tgtggatctc aactccattg ctttcctttt tgatggtcgt 180
 aggctccgtg gtgagcagac ccctgatgag cttgagatgg aggaaggcga cgagatcgac 240
 gccatgcttc accagaccgg aggggtgcttt cctggccctt agaaggagct tgctgcagcc 300
 tggctgttct atgtcgtatg ctacctttag aactagagta aaatgtaaga agtgaaagaa 360
 cttgtgaggc tatggttctg tgccatagcc tgaggggggg tctggagggtg aaacaacatc 420
 ggagtactgt tg 432

<210> 258
 <211> 417
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-005-Q1-E1-F12
 <400> 258

ggtcgacggg tatgtgagat ctttatgact aatgttgagt ccatggatta tatggactct 60
 taccttacca tcattgctag cctcttcggg accgtgcatt gctctttctc accttgagag 120
 ttggggcaaa cttcactggg gcatccaaac ccatgatac gatacgctct atcacacata 180
 aacctcctta taccttcctc aaaacagcca ccatacctat ctattatggc atttccatag 240
 ccattccgag atatattgcc atgcagcttt ccaccatttc atttattatg acaggcttcg 300
 tcattgtcat attgccttgc atgatcttgt agttgacatc gtatatgtgg caaagccacc 360
 atgcataatt tatcatacat gtctcttttg tttcattgcc catccccgata caccgcc 417

<210> 259
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-005-Q1-E1-F5

gggtcgacgg ggaagaccaa attaaccatg gcgaccctgc cgcccaggtc gggagctttc 60
tccaagggtc ataagttggc ctacgcctgg gacaaggagg cgccgctcac ggggcagcag 120
aacgccgcca tctccgcgtc ctgcacgcc ctgcgcgcc ggctgttccc ggctaactctg 180
cacgatgcag acaacgactc tgctttcaag gatgccgggtg cagtggatgc ggccttggtg 240
aacacacatc agttctacaa atgggttgtt caactagaat ctgccatgaa atccgagatt 300
gacgataagt atcgctctta tgagagtaca ttacaggaac atgttatcac atgtgatggt 360
atccttcgac aagtggatga cacactcaac ttgtttgaac aagtacaatc cttgcac 417

<210> 262
<211> 436
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-005-Q1-E1-G7
<400> 262

attccccggg cgacgggtca gagcagtcta atgccgagcc aagcgatcgg gttgtgtttc 60
ttgagaagaa gattgcagaa cttgagaggc gggctaaagc tagaggcgaa tctcaagagt 120
aataagctaa caggtaagtt ttgatcgagc acgtgaatcc taccctaaag aagcactggt 180
tgtaacctct gtctgggtggc gaaggggtat ctggcaccga cttaccata tagcaccaag 240
atttgacttg gactatccaa ttttgtgagc atgtgtgtgt ggcaactggt gtttcgagcg 300
aataaagagg gatcctggca gataaaatcg ccagtgtttg ttgggttaac cgcagtgatg 360
ctggtcgagc agaaaccaga gggacttat tattcttgta tcacttgctt gacatttgag 420
aatcgaacga tgtaat 436

<210> 263
<211> 440
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-005-Q1-E1-H5
<400> 263

ggtcgacggg aggatgaaaa ggtgtgggtc cgaagaactc ctctctctcc gaacacctcg 60
atcaccgaag accaggaggg aacgtccctc ttggacagcg agggaaagga gtccggggcca 120

tctggacccc ctccgacgac cactcccagag cgtccaaggc ccccaacagc acaggttcct 180
tccaactggg aggggggcgg gagccaatgc cagtaccgaa cacctccgca tgggcggcgg 240
ttgactggcc ggatacgtc gaggagttgg tgagcaactc cgtcatagtt gaatggcacc 300
gcacccttat ggggtgcagtt atgcagagtg ttcgggtctgt ccaatccgta ctgaacgacg 360
atgtccaagg ccttctaaca tgctttgagg taagtcaagt aatgatattt cctcataatg 420
tggttatagt tgtttaattt 440

<210> 264
<211> 439
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-005-Q1-E1-H6
<400> 264

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ttttatgttt taattagtgt tcgtgccaag tagaaccatt gggaagactt ggggaaagtc 120
ttgttgatct tgctgtaaaa aacagaaact ttagcgctca cgagaattgc tgccattttt 180
attggagagt gctatttagt tagttatttt tgcataatgat taatatataa attcctcacg 240
tccagaaatt tatttttagaa cttttggggg tccagatctt gcgttagcta cagattacta 300
cagactgttc tgtttttgac agattctggt tttcgtgtgt tgtttgctta tgttaatgaa 360
tctatggcta gtaaaatagt ttataaacca tagaaaagtt ggaatacagt atgtttaaca 420
ccaatattaa taaattata 439

<210> 265
<211> 424
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-006-Q1-E1-A10
<400> 265

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ttgcagtgtg aaaccctact cctgcttggt tttggattgc aatagcgaaa gagaatgaga 120
gtacaagggt tggggatcaa gtggtcgaac tcctctacgg cggctccctg ccaccccttt 180

atatctacct tggtcctctt ccaccgaaaa cattggcgag aagggttggc acacaatggc 240
aattttcacg ggggacaggg atgtagtcta tcgctagaaa aggtggtctt caccttcaaa 300
gacaccgtcc atgacgcatt ggtgggctct ggaatgatct ctaccctaca cgcccatcgt 360
catggtcatc ttgcaccgat cgggcaatat ttggggttgc tattggaacc tgcatgctgc 420
cctt 424

<210> 266
<211> 285
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-A11

<400> 266

cccggtcga cgggggacag gaaggtgatt cgggtgatga gtactagagc agatgagttt 60
gcgacctgat gtacgtcaag cgcccttcg tctactacta tcctgtgatc tgccaagcg 120
gctttatctg ttgtctgtct gtttgaatgt ttgctgtgtg gtgtttggtt tacaacctgt 180
tgtgttgat gaacctgtgg tatgtttgaa cctgcttcgc accttggtca atatgcatgt 240
tatcggttt gccgaagacg caactggcct atcgtaaac gggga 285

<210> 267
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-A6

<400> 267

attccccgggt cgacgggttg ctctgcttcg agtatctcag tggcggaagc atcgataagc 60
ttatctataa gggaagtggg tacgtgctag attggagcgg acgctacaag attgtgcaag 120
gaatatgttc aggctgcac tacctacacc acgaactaga ccatgagcag aacatcgttc 180
acctggattt gaaagcgagc aacgtactgg tcagccgcgg cgatggggga gacatcacct 240
gtgtgaagat cgccgacttt ggcctctcaa agttcttcaa agcggatcta acacactcgt 300
acacggagca ggtcgttggt ctattggcgt acatggcacc ggaatacgtc tgcaagggca 360
gaatttcacc caaggccgat atatacagct ttggcattct tattctggag atagtcaactg 420

ggc gat gcg

429

<210> 268
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-B10

<400> 268

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acgggaactc gaaggagttc ccggcgccag gtgttgctcg actcatcgtc cgatgactcc 120
gaggcggact cctccccgca agacgaggag gaggaaaaag aggcctctcc cccggcaggg 180
atagagaaga aaaggaaggc cgccccaaact ggggaggccg gaggggtcaa gaaggggaagg 240
accccccccc tccgaactac tccaccaacg ccgacgacgg cgaggaggag tggccaccaa 300
gggctaagcc cttggcgaaa tcgtaagcgt ccgggtacca gaataactca tggcgtttca 360
tttgttgcac agaatctcct aacgccgaat ataaccctgc agcccgccca aggaccagct 420
tgatgcctc 429

<210> 269
<211> 268
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-B12

<400> 269

cccggtcga cgggatacac tcacatgaag tcttattaac attacaacca agggacatgc 60
actggaccat gtccctgtag ggcacattat aatcatgcac atagaataag ttgactactc 120
agttaatgca taacactgtc aagatcatca ccgaataaag ggacatcatc ttggatttca 180
acatgcggcc gttctaaagg atacattctt acgtaagcgt gcaatcgaca tcataacctca 240
tctatagtgt catctaaatt cacttcat 268

<210> 270
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-B5

<400> 270

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aatgatttga aatttgagcg cacctcacgt accaaattat ctagtacttg gaaaaaactt 120
ggaatttttt gattttatct ctagtatttg ttttgaattg tttttcaacg cgggtgcaga 180
tgagtctggg caccaaactg ctgcactcgt tctcacagga tcttccgcct atgactcgct 240
tatagccaga tgtatggctg cctcgcccaa tccagcatga gactatgccg acccagcgtg 300
tggtaggcta taggcctcga aacactcttt tccccctctt tttttttgac cttttgtggt 360
cttagttttt tagttttttt acttttatct agacttccaa atttttttgt ataagaaatg 420
ttaatcatgc attcgataaa tattaata 447

<210> 271

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-B6

<400> 271

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gcacggcggg gggttttattt tgaagaaata gatgtactct catgcttcat ttatattatt 120
ttgagagtct ttagaacagc atggtaattt tcttgggtta taaaattagt cctaatatga 180
tgggcatcca agagggatat aataaaaact ttcatataga gtgcattaaa tactatgaga 240
agtttgatac ttgatgattg ttttgagata tgaagatggt gatattagag tcatgctagt 300
tgagtagttg tgaatttgag agatacttgt gttaaagtgc gtgattcccg tagcatgcac 360
gtaggtgaa ccgttatgtg atgaagtcgg agcatgattt atttattgat tgtaatcctt 420
gtgagtgg 428

<210> 272

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-B8

<400> 272

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ccagaccttt ggatttggca ttctttcttt ggtttaccag gatctcataa tgatataaat 120
gttctccacc gttcacccat gtttgcaaatt ctagttgaag ggcatgctcc agaggcgaat 180
tataccatca atgggtcacia ctacaaacac agtgtattac cttgccgatg gcatatatcc 240
gcagtgggca acatttgtga agacaattcc aaatccaaac ggtgagaaga acaaaaattt 300
ctcccggttt caagaagcat gtcggaagga tgcgaacga gcctttgggtg ttctgcaagc 360
tcgttttatt attgtacgtg gaccggcaag gtattgggat ctggagacac tcggagaagt 420
gatgacagct tgcacatcc tgc 443

<210> 273

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-C11

<400> 273

tataatgagt cgtaatatga gaacctctc ctggatcttg cacaaattgc taatctgttg 60
atcagacact tcatcacgga aaaccagttc cctcctgggt gtgtacaaga gctgtatgcc 120
tcgttgacag aacctctgct gcctgctgtt ccagtgcctt cccctcaggc tatacagaaa 180
ttccttaagt tcatgaggaa ctaccctgga ctaaagcacc caaggagaac aagcacattt 240
atcagcaaag tatttcaggc tgccagagcc atgggggcag ctcagtatgc cagtgtcatg 300
acagcgggtat caagggtaca agtgccgcaa gactggatga atgtgactga ataattggga 360
tatctactgc t 371

<210> 274

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-C12

<400> 274

tccccgggtcg acgggtcaaa tgatgcgtcc gtcgtcaagg ctgaggataa gggaggtgct 60

acccatgttg atatagcatg tgaccaggac ttggtaaagc ttgcgctgga gcttactaac 120
 cttccgatat gtgtatcgtc tgtggatcct tcagcattcc aatctgcggt agaggctggc 180
 gcgcaaatga ttgagattgg aaactacgac tccttttacg acgcaggcat cgaattctct 240
 tctgagcaaa tactgaacct gacaaggag acaaggaaga tgcttccaga catcacgttg 300
 tcagtaacag ttctcacaac tctgagcctc ccagatcaga tgagacttgc agagctactt 360
 gaagaggaag gtgccgatat catccagact gaaggagga agtggttctag tccgacaaag 420
 cctgcggtgc ttggcctaata tgaaa 445

<210> 275
 <211> 443
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-006-Q1-E1-C2
 <400> 275

ggtcctaaat tcacgggtcg acgggatgca caaatcctat gcttcagggtg agacagccac 60
 gatgggaaca cgactcatat tctaaagttc tctatttcga ctgagctgtg attagagatg 120
 tcagttatat acagaaaaac ttgaatggat gtgcgtttgg ggattataca atttaaaggc 180
 aactttattt ttttgctttt agcgtatgga cctgcagggtt atatctaata gtagtagctt 240
 attgacttct gaaagcaata taagcccaat agtctttgca aaaaaaaaaa cccaccaact 300
 actggtttta tagccagtta gaccgatca tcacacttat tttttctctt attgggttgaa 360
 ctccaattat tctataattg ctacattaac aaactgttct tcacattcgg ttgtgatttg 420
 gtttcagaag ttcattttta cat 443

<210> 276
 <211> 200
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-006-Q1-E1-C6
 <400> 276

gggtcaccct aaactgagtc ttatgaagtc tccgtgtaat gtcgctacta cgccgtcact 60
 tttcaagtcc gggcggtatc tgctgcagtg ctctagctgg atcatgctgc tcaatgaatg 120

cggccgctct gtaggatcta agctgatgga agcgtgcatt cgacgtcagc actcttcggc 180
tctgtcagct aatttctgtt 200

<210> 277
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-C8

<400> 277

aatgcccggg tcgacggatt acatggacaa aggtatacat atagccttta ttatcaaaaa 60
cattgttttt aaaatcaaaa tacatgtcat tggaacatga tattctttga gcactgagcc 120
tctatgaaac gggcaccttc taagacttct tcaaaatagt gtcggggcga gtcctggccc 180
ctgggtggaa cactagttgc aatatcggtg gcctccatct tcgcccagta tgttttaaca 240
tgggcaaggt ccatccgcgc accctctatg cacgctgacg gcttgacagc gtcgatatgc 300
ggcacatcac aaataaatcg ttgcaccaa ccaaataac tatccagact tggttccttc 360
atccacaggt gatccaagac ggccttcacg gcaagcccg ataacctatg gagctcggcc 420
cattcagcca ttgctcgtt c 441

<210> 278
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-D10

<400> 278

cgggctcgacg ggtaaaaggc atctggatgc gaagacagt atcgcatccc gtcgagaatc 60
gtgcacagat cgtccaactg ggttaactcg cttctgcatt ccggtcaggc tggaccagcg 120
cctgaccagc acatgccatt gtctgaagg tttcttaaca acagcagatg atgccactta 180
tatgtgctca tctgaccaac actgatggta cgaagaagct gcgtgggtgtt ggtacccgga 240
gaatcgctgc atatggcaga tcaaagctgg gaaaacattg attaatttgt aatctatggt 300
tatgttttgt tagtgggtgat gttacagcaa tgctcatttg atgttagctc atgcaaactg 360
ctaattgtgtt gctaacagta gcactctggt gtgtttcgac agattgc 407

<210> 279
 <211> 339
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-D11

<400> 279

ggtcgaccgg aaatctgatg gtctgtaatg tgaaagcgaa gttctgttct gtcttcacaa 60
 aaaaaaataa taaaaatggg taaaaactaa aaaaaaatc aagtcaagaa aaaaaaaaaa 120
 actaaaaaac aaagaacaat tatcaaaaag gtatctaaaa aaataaataa atgatgcaac 180
 attaaaaatg ctcaactaac caaaaacaga tcatagcaag acccctgcct agtgtttgca 240
 cttcattaag tgctgcatac ggtatagcaa ccctgagaat actcccaata atttattatc 300
 tatgattttt tttatgttac tggatgatgtg aaaaccctg 339

<210> 280
 <211> 412
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-D12

<400> 280

ggtcgacggg catatggaat aactttgggg ttagggagt tggatgcaca agcagtattc 60
 ccgcttagta taggtgaagg ctagcaaagg actgggaagc gaccagctag agtgcgacaa 120
 cattaatgaa catgcattaa aattaatcaa catggaatgc aagcatgagt aggatataat 180
 ccaccatgaa cataaatatc atgaaggcta tgttgatttt gtttcaacta catgcgtgaa 240
 catgcgcaa gtcaagtcac ttaaatcatt cagaggagga aaccacccta tcataccaca 300
 tcagaaccaa tttaatagca tgttggcacg caaggtaaac cattataagc tcctagctaa 360
 tcaagcatgg aacaagaaac tatgatctct agttgtcatt gcgaacatgt tt 412

<210> 281
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-D5

<400> 281

ccgggtcgac gggaaaaggt aacgtgccac ccatgctgca tccctcatca tatattggct 60
cacctgttat ctggattggc gttggtgtag cagtatctgc agcattttcc atgggttcat 120
cgatggtgaa taactatgca atggaacaag cattcaatgt cgatagatga cgcatgcacc 180
acagtacaca tttggtgcca actcgccatt cccattctct atgccaccac aggaggtcc 240
cacggcacca agtagttacc catactcagg accaatgaat aataccccca aagggtgcaac 300
tgttgatgtt tcagctactg aagtggcatt caactggatc ttcggacgca gctgatgtgg 360
cagaaacatc gaagccttca tagaaatttg ccatcgttga tgtttcgccc gaagagttgc 420
aaaagcagta tgagcgtcaa tcttc 445

<210> 282

<211> 385

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-D6

<400> 282

ccgggtcgac gggatacagt tcccagtggg acatgaatac acgcatctca agcagagggt 60
cgcggttaat ggccgtgtgg gtgtcagtgc tgctgtgtac tctgcagcaa tccgtgagta 120
ccttacgtgc cgaggtcctt gagctggccg gcaacgctag caaggatctc aaggtaagc 180
gtatcaaccc tcgccacctg cagcatgcga tctgtggaca cgacgagctg gacaccctca 240
tcaagggcac catcgctcgt ggtggtgtca tctctcagag acacacctca cgcatcacca 300
ataaatccac tgactgaata atatgcatta accggttgtt gttgcatgta gtatcttcga 360
gataccatgt tatgttgtgc tatct 385

<210> 283

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-D9

<400> 283

aattccccggg tcgactaaat cattaaactg tgatccccctc ctaacggtgg cactaatcaa 60

caacttgccg acaacgcca gcaatgggaa tggatcacccg ataacaacgt gcggcgaaag 120
 ggatcggcat actgggtagg ctcatattga tacggataag caaaacttat taactgatcg 180
 cacattcagt caattagggg accaggactg ttctgtctca gtccatgacc acacaaagca 240
 attcagcagg tggaggatac ggaaacggaa gctacaaacc gatcctaatac aagcatgatc 300
 tgtcagattt ctaacggaaa caaagatagg attattttta gagagaatta ttggactact 360
 atatggggca gaagcctatc ctaagctagc ctgcgagact actgtttctg atg 413

<210> 284
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-006-Q1-E1-E11
 <400> 284

attcccggt cgacgggtca tacataaaaa atactacaat cactggagat ttttatgaat 60
 taagagaata ctgcctcatt atgatctgtt gtgtataatt agaacttctt gtgggtaaaa 120
 aaaacaaagg ttgggataag gaaaagctga acttaaaaac tgtacgtgag ttcatagata 180
 gttgtacata ccttgatgga tagattagat ggcaattctt tactgttgat cacgccaagg 240
 atcaggttca gggccaccga tgctatgtat tccactgtag ccatgaagag cagacctcca 300
 aaggcgctca atgctctctg cagcgtgctg catgtgcac gctaagttca gttaccgcca 360
 acaacggcgc cgacagatgg tggcgaaagg agatcagcaa ctcaataa 408

<210> 285
 <211> 409
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-006-Q1-E1-E12
 <400> 285

ggtcgacggg gaacactaaa gcgaggcgga ggactctggc atgggagacg tataacttcac 60
 aaaggctggc gctggcatgg actgagcggg tctcctccca cgtgggatga gattgcttgt 120
 acagcgccag caatgaaggg gaagaatgtt tggctcctcc tgtttgtttg aggatgcacg 180
 ttggatggat ggacgaatgt ttactctgtt attagatatt gatgatcagt tgtatgctac 240

gaagttcaaa aaagtgtttc acgtacttta aaaaatgttc ttatttcacg catctaggaa 420
acagtttatg aaaat 435

<210> 288
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-E7

<400> 288

aattcccggg tcgacggggc taagcaaagt ggggaaaggc gtcttcgtac tcgcctctct 60
ccgcgcaacc gagccttcgc cctcctcctt cccatttcg ccagcggcgc agcccaccaa 120
ccacccccac ccgcccgcac gagggagtgc atctcgatcc acatcggcca ggccggcatc 180
caggtcggga acgcgtgctg ggagctctat tgcttcgagc atggcattcc gcctgatggc 240
cagatgcccg gtgacaagac cgttggggga ggtgatgatg ctttcaacac cttcttcagc 300
gagactggtg ctgggaagca cgtcccccg gctgtcttcg tagatctcga gccactgtg 360
attgatgagg tgaggactgg cgcttaccgc cagctcttcc accctgagca gcttatcagt 420
ggcaaggagg atgcagccaa caac 444

<210> 289
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-E8

<400> 289

cccgggtcga ctgggcagag aacattact caccgccggc tcccgactcc actcattggc 60
gcatgcattt cgatgggtcc aagatgcgca ccggcttggg agccgggtgc atcctcacct 120
ctcccaaagg ggacaagctc agatacacgc tgcaaattca cattaccgcc tccaacaacg 180
tgcccgagta cgaggcgctc atacacgggc tccggcttgc caaagaactc ggcattcgcc 240
ggatcctatg ttatggcgac tcggacttgg tggccaaca atcatccggt gactgggatg 300
ccaatgacgc aaatatggca agctatcgct tctcgttca gcagatcagt gggatatttg 360
aaggatgcga gttcctccac gtaccacgaa cccacaacga gccagctgat gccctggctc 420

caataagct

429

<210> 290
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-F6

<400> 290

aatgcccggt tgcacgggca aaatcaaata tgggccataa ttgagcccaa agcctcttaa 60
agggccggac ctgatctggg ttgtgatttg gccagaaag tgggaggctt ttaacggggc 120
ggatcttata tgggccatta ctaggaccgg aacatggcag gccattaatg gaccgtatca 180
attatggggc ggcatttggc ccaaaacatg gtagccagtt aatgggtcgg cctactaggg 240
tctcaaaat cttttgggcc tatagctggg ccggcccatt aatgtcggcg aaatctcatg 300
ggccttttagc tgggccggcc cgttatgac cgcaagaatt ttgtgggcat ttacctgggc 360
cggcccatta tggcacacaa aaatcttgtg ggcctttacc tgggccggcc tattatggcc 420
cacgaaatct tgtgggcctt tagctggg 448

<210> 291
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-F7

<400> 291

attcccggtt cgacgggcct ggcgcactct ctggaggacc ggcgccatgg cggcggcggc 60
gctggcgag ggaactcctc gggcgattcg ccgctgctcc tgctgccgat gctggacgat 120
gacatctccc gtgagggtcca gcgcctagat gctgatatgg accgattcat cagggcccag 180
agtgagcgca tgaggcagtc tatattggag aaagttcagg caaagcagtt tgaagcgctg 240
gcctctgttg aagacaagat cctccgaaaa atacgcgata aagagtcaga agtcagaaac 300
atcaacaaaa ggaacctgga actcaggagc cagattaaac aaatggcagg ggaagttggt 360
gcgtggcagc aacgagctaa gtacaacgag agcatgatca gcgcactcaa gtacaacct 419

<210> 292
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-F9

<400> 292

ccgggtcgac gggcaagtca acacgatctg cgccgagagg ttcaggtgcc cggaggtgct. 60
 gttccagccg tgcgtgatcg gcatggaggg tcctgggatc cacgagacca cctacaactc 120
 catcatgaag tgcgacgtgg atatcaggaa ggacctctac ggcaacattg tgctcagtgg 180
 agggacgacc atgttccccg gcatcgccga caggatgagc aaggagatca ccgccctcgc 240
 gccgagcagc atgaagatca aggtcgtggc gcctcccgag aggaagtata gtgtctggat 300
 cgggtggctcc atcctcgctt ccctcagcac attccagcag atgtggatat ccaagggaga 360
 gtacgacgaa tctggccctt ccatcgcca ccgcaagtgc ttctaagcct tggg 414

<210> 293
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-G11

<400> 293

cctagagtga gtcgtattag ggtgtcctcg tgtacgagcg aaggggtatg agcctggggt 60
 gattgcgaaa tcattgggtat acacttttta ccggaaagtg ctcttctgct ctcaagctca 120
 aatgctccct gatgaacagt aaaataaaaa tagtaaaaaa tacaaaaaaa tgtaaatggt 180
 ttttgtggta aattttgacg aatgttttat gcgcttgata aatttcagca tgaaaggaca 240
 ttcgtggaca ccatggaaaa aaagaatcaa cgctccaaaa tgctttcaaa actagcattt 300
 ttggagcatc gtttgttttc acgacttcca tgaatgttat ttcttgataa atatttgcaa 360
 gccacaaga cacttgagaa tgtttaccac aaaaatattc agattttttt caatttaagt 420
 atcaattt 428

<210> 294
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-G12

<400> 294

gggtcgacgg gcatacatga tcttagtgca taaactgtat caagatatct gttggtactt 60
ggtactggta gcaatagaga ctctcccctc ccctcctcat agctatttct tcagttatgt 120
ctcgaatgcg taatgtcgtc gtagccacta tctgttcaaa aaactagcgc ttcttgatgc 180
acaaattaat accttattgg tatgcatcga ccgatggtcg tgtgtttgat atggggatcg 240
tgtgttgttg gtcggcgatc gaactacatg attttggatc aacaagtaaa ccaacactag 300
tcttgatgt atgtccatgt tgctagaaaa aaaacaatat aaaaaaaaaa tataacaata 360
acaaataaaa aatataaaac caaagaatc aatactac 398

<210> 295

<211> 436

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-006-Q1-E1-G6

<400> 295

tccagaagtc ccgggtcgac gggaaaaagc aaaatgccga gaatcggctg ccggcgggca 60
agaagaccgc ctccaaggag ggcgggcgag agaagagggg ccggaagaag ggcaagaaga 120
gcgtggagac ctacaagatc tacatcttca aggtgctgaa gcaggtgcac cccgacatcg 180
gcatctctc caaggccatg tccatcatga actccttcat caacgacatc ttcgagaagc 240
tcgccggcga ggccgccaag ctgcccgcgt acaacaagaa gccaccatc acctcccggg 300
agatccagac ctccgtccgc ctgctctcc ctggggagct cgccaagcac gccgtctccg 360
agggcaccaa ggcagtcacc aagttcacct cctcttagat tccattgcct gtatctaaat 420
agctgttcgc cctgggt 436

<210> 296

<211> 436

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-006-Q1-E1-G7

<400> 296

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 ggggtctcggc taatggccgt gtgggtgccca ctgctgctgt gtactctgca gcaatccttg 120
 agtaccttac tgccgagggtc cttgagctgg ccggcaacgc tagcaaggat ctcaagggtga 180
 agcgtatcac ccctcgccac ctgcagcttg cgatccgtgg agatgaggag ctggacaccc 240
 tcatcaaggg caccatcgct ggtgggtggg tcatccctca catccacaag tcaactcatca 300
 acaagacctc caaggagtga atgaaatgca ataacgggta gttgttgtgt gttgtatctt 360
 cgtgatccct tgttatgttg tgctatctgt tacgtgttgc tattatcaca acctgaatag 420
 gttgtctgaa tttgtg 436

<210> 297
 <211> 354
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-006-Q1-E1-H10
 <400> 297

ccccgggtcga cgggactgac tgggagaaca tgatgaataa ggagttgcat gataaatttc 60
 agcaaatgat gagtgaacag gtgcaagatg tggtaaacag atttgaagag gccatggaga 120
 agatagatgg catggagaag acgttcgaaa caaagctcga taacaaattt aatgaattgc 180
 tcgcgcgtct tccaccacca ccacaggctg ccctaacgc accactccaa caacaacaag 240
 aacaacaaga acaacaacaa caacaacgcc gctttccaaa tcaagtggga cgagcacatc 300
 gcgttcccat tgaccctaag caaacttctg gtgtcgctgt tgatgcctct aacg 354

<210> 298
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-006-Q1-E1-H3
 <400> 298

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 tggttgccct ctttatatga tgggacgttt cgggcatgtc catggacacg tgctagccca 120
 cgaccacagt cttgcatgcg cccacgtata cgcgacccca ctcgtcagct aacgggtcaa 180

ggcattgacc caacggcaac gtccgttata acctcttatg aggggtttcgg gcaagggagt 240
 ggggaaaagt gagcaaaagt taacagagtg gggatgaatg agtagagcta aggaaccagg 300
 ggcacagaaa taaaaatccc tagaaaataa cgataccgcg cgcgagcctc aatgttcatt 360
 ggaccacata catcagtatg tatgatttcc aataaatatg tttctcgctc cattgttccg 420
 gagaac 426

<210> 299
 <211> 323
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-H4

<400> 299

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 ctccaacaa tatgacatga gcattccatt tcatattgct tagcatgatc gtaagaaagc 120
 tagcatgatg ttttcatggc ttgtccgctt cttgatgtca ttgctacgct agatcatagc 180
 acatcctggt acaccgccgg aagcattcat atagagtcac atctttgttc tagtatcgag 240
 ttgtaatat gagttgtaag taaataacag tgtgatgatc atcattatag agcattgccc 300
 cataaaaaaa gaaacatcat att 323

<210> 300
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-H5

<400> 300

aattccccggg tcgacggggg cgtgtcacga gtcggtcat aaaacggggg gtttccgttc 60
 gggctctgtc ctcatctctc tctcccgagg tttccgaag cctccgcgca cgacgcgact 120
 cgcgccccga gatcttgaac gaagaaagga agttgaacca tggggaagag aaagtcagct 180
 gctaagccac cccctatgaa gcggatggac gagctcgaca cagtcttttc ctgcccggtc 240
 tgcaatcatg ggagcagtgt ttaatgccga attgatgtca agaattctgaa tgggttaggct 300
 aaatgtccaa tctggcagga aagcgtcagc acttccgtta aagcccttac tgaacctatt 360

gataaactgg gccaa

375

<210> 301
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-006-Q1-E1-H7

<400> 301

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gtggacgaca ctgaatgcat gcgagatccg ctgcggcgaa tggctgcctt gacggttggt 120
gggtgtggatt aggtgccggc gccggccgag agtgcagacg cacagatctg ctcgagcgtg 180
gtgtggttgg cagaaggaag aactcgtcgc cgccctcgca ggtctccacg ggaaggccag 240
cccacatgct ccgcggtggg taaagagaac ggctgcttct tcagtgccta ggcttgaaag 300
atgttcatgt ctatcgatgt tgtgatatgt tgatcggagc attcataaac gacgtgagcc 360
gtggatcagg ttctcgatct ctgtccggtc tgtggctcac aaatgtcgat gactccatgg 420
attcaatgca aggtga 436

<210> 302
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-A12

<400> 302

gggtcgacgg ggatcactgc ctttgcttcg cgccgccgag gaattgacga ccgcacgacc 60
cggaacagta tccagttggg cgcgtttgac attcgcggga aaatatgctc cgcccaggta 120
gacgtgctct cctctcgtac gtaaacaaag ccttgagcaa tctttgatca aacttaaaca 180
cctgtctcct actccctccg ttcggaatta cttgtcgcga aagtagatat atctaaacat 240
attttaggtc gagatacatc catttccaat acacatgatt ttcagaggac ggagtatttg 300
tgaatgcacg gtggagtagc atgtgtataa ttcataaagg actgaggtac cggggcattt 360
tcaaaagcta acatcagcgg caaacggtat catcgaaatt cattggtttc ggtttgt 417

<210> 303
 <211> 259
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-007-Q1-E1-A4

<400> 303

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 gcaacgatgg caggacgttg cgatcagctt agtgatgcac aacgggatcg atgctgacgt 120
 caacatcact agttcacagc gatatgatac ctcggtacac gtaccaggat gcaatctaga 180
 ctgggcaaag cccaccatcg cccgcctgat cgtccaaacg tgcactagcg tcatctgcac 240
 acctcaggca acctcttca 259

<210> 304
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-A5

<400> 304

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 ggagaccggg aggcatgtca ggatgctcat ccatgagatc aggagcacgc ttgacaggca 120
 caccatcctc aagactactc tggttgagct cgggaggacg ctgggtctgc aggaatgtgc 180
 tttctggatg ccgtcgagga gcggttcgag ccttgagcta actcatacca tgcgccacca 240
 catccccacg ggctcttctg tggagattaa tctccctgtt gtcaaccaag tcttcagtac 300
 caaccgggct attatagtgc cacatacatc tccttttgcy aggatccacc ctgttcaagg 360
 gcggcatgtc ccacccgagg tggctgctgt gagagtcccg ttgctgcac ttccaaactt 420
 tcatcctgag cttt 434

<210> 305
 <211> 466
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-007-Q1-E1-A6

<400> 305
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 ccaaaacaag ggcaaaagag tttggaaaag tagatacgat ggagacatat caatagtcac 120
 attgcttacc accaacatct tattttgatt aggcggtatt gtgggatgaa gcggcccga 180
 gcaaccttac atgtccacgc acatgagacc ggttccaccg actgacatgc aacttgtttt 240
 gcataaaggt ggctggcggg tgtctgtttc tcctacttta gttgaatcga atttgactat 300
 gaccggtcct tgaagaaggt taaaatagca aacttgataa tcgttgttgt ggtttttgcg 360
 tagttaagga cggttcttgc tagaagcccg tagcagccac gtaaaatttg gaacaacaaa 420
 gtagaggacg tctaacttgt ttttgcangg catgttgta tgtgat 466

<210> 306
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-007-Q1-E1-A7

<400> 306
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 cgctggccaa acagcgtgag gaaataaagc gcatgactgc tgagtttgat gcgagcatgc 120
 tggagatccg caagaatttg gatgctatgg atgaaattga gaggcggagt gcggaggact 180
 atgagaagtt ccgtaagaag ctaaacaata ttgagaaagc atgcaatgtt gctttgatcg 240
 tgctggtgcc tagcactggt ctgcttttta tgtcactgta gtatcatctc tattagttag 300
 ttataagaaa cccttattta actagtgggt taagaaaccc taccttcaga actctatgtg 360
 ttgtagtgat ccagctttgg actttgcatt gcacctaata gaacgca 407

<210> 307
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-007-Q1-E1-A9
 <400> 307

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 ctggggaccg ccaagtcgcy agttcatacc tcgaaggcat cattctggca aaccagata 120
 agaataactt ccttgtgcct taatttcccg agtaattcat cccctaaccg ccccgtaaca 180
 tatgatttct tagatttcga tcgttctttt ttctaacatt tcgtgttctg tgcagtgaca 240
 cacattgcac actcatcctc ttaagcccga aatattccat ggccacgtat ttcgacccga 300
 accgtgactc caagatagac tacacanata tcaagaaagt tcttgatgat gttctccccg 360
 gctacgcaa atctggaggc accttcacca ggccagttcg taggt 405

<210> 308
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-007-Q1-E1-B10
 <400> 308

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 gggcgaaggg gttcggagga atttctaaat ttttgcccg tactatata agcccgaccc 120
 tgtcggtgtg accgagtga acaactcgg ggacccgaga tgcataacta tggtacaatt 180
 gtgggaggcc tggacactat tccaatgagt gtacgacacc ctacaaaaga agagaagatt 240
 ctccaagaag aagaagtaaa agagaagaat caccaccaag agagaggagg agtagagatg 300
 atcgttatga acgaagacc tcacggagaa gcaaggattc ggaaaggaag gacaagtcac 360
 caaggagctg cacaaaacga agacatcaag ctcatgttgg tgaatgggta tccggctccg 420
 actccgacaa tc 432

<210> 309
 <211> 354
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-007-Q1-E1-B6
 <400> 309

taccggtact atattcccgg gtccacgggg agggcgaata cgaggacgag ctcgaggacg 60
 atgcccaccc ccaggactag agatcaaccg agtaccgcgt atgattattg gttcttttct 120

tatgttaatt tgattgtgta gtgctcttct gtctttcttg gtgggtgctg ttgttgagga 180
acagaaaact catggaaggg tgggtgttgg tgagatagct tggataacc tctggcacia 240
ttgctgtgtg caagcaacgc cctgttgcgt tctactggta gtgggtgtgtg ttgtctgggtg 300
tccattgtct aactatcatg tccaaatcta atgtaatttg aagttgcttg tgtc 354

<210> 310
<211> 417
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-007-Q1-E1-B7
<400> 310

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atctctctga ccatgaggac aggctctctg ttattgaaca gaagatcgct gtgctcctgc 120
ctctgcataa aaaatatgct gagttgaaat ctgagtttga actcaaatca tatgatctgt 180
cattatttca aagcagagtt gaacaaaatg aacatcacia gttagggtgaa cttgtgaaga 240
aacttgagca agaactccag gaatcaaaag aagaattgaa ggaaaaacaa gtggagcata 300
aaaaatgtgt ctccactgtt tctgatttgg aaaagacaat taagacttat ggcagtgaac 360
gtgaaggtag gctcaaagct ctagaaaaaa agataaagtc actgaaatcg gaaatgc 417

<210> 311
<211> 417
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-007-Q1-E1-B8
<400> 311

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gtgctttcct cgcccttaga aggagcttgc ttgcagcctg gctgttctat gtcgtatgct 120
acctttagaa ctagagtaaa atgtaagaag tgaaagaact tgtgaggcta tggttctgtg 180
ccataacctg aggggggtctg gaggtgaaag aacatcggag tactgttgat gtcgtgactg 240
aagtatcatc cattgcctaa tatatcatgc cttgttgtgt tcctagtga aaaaagaaaa 300
aaaaaggaaa aaaaaaaggc aaaaaaacaa aacaaaaaaa gaaagaaacc aaaaaaaaaa 360

aaaagaaaaa gcaacggaaa gaaaaggatg aagaaaaatg acacagggca taagggg 417

<210> 312
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-C2

<400> 312

gagctgtgta cgggtggtgta ataaggagcc tgcgatctc cactagagtt atcccaagtt 60
tcacttcaca tcgtgatggt gtgttacctt ctattttcat gtcgtcgtcg cgctgcctgc 120
gattacggac agcgctccct gttgggtccg cagtcggtcg agcagcagca cgggtcaggc 180
cctacccttg gatctgacgg cgctgctgac tctacaggcc taggctcagg cccatctgag 240
aagacaggcg atcgtggtga cgcatagac gctgatttta ccgacagcaa ctgaatacaa 300
cactacgtta ggacatgatg aacaagtgag tatgagtttg ttccacatta ttgcctagta 360
gtataaccggg tgaccgcttt ct 382

<210> 313
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-C6

<400> 313

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tgtcaaggag aaggtggagg ggaagctcaa ggaactccag gtcgccgttg ctggtggatc 120
gacacagacg ataaaggatg cactagctgc gttgaaccaa gaagtgatgc agcttgggtca 180
gtccctctac cagcagcagg ggtcaggccc tacccttgga gctgacggcg ctgctgactc 240
tacaggccca ggcccaggcc catctgagaa gacaggcgat ggtggtgacg tcatagacgc 300
tgattttacc gacagcaatt gaatagaaca gtaggttagg acatgatgaa caagtgagta 360
tgaatttggt ccacatgatt gcctagtagt atacggggtg accgctttct ttggatc 417

<210> 314
<211> 441
<212> DNA

taccggtaca gaattcccgg gtcgacgcct taatatgtgt gggccacttg gttttacggg 60
aacgagggcat ctttttgggt ttggggacca gtggagatat acatacaaaa aattgtggac 120
gtaggttcga ccgaaaggca atgatgcatg ggccctgcat tttgatatac ccgctgccgt 180
gtgaaatttg ctactctact caaaactagt aaggtagaca tgcattaaat gcatgagatt 240
tggaaccaa attatgaata agtacacact atagcatgta aagctttgag tcatatatgt 300
atgatgtaga tggttcattta gttcttatag ttaataccat tcaaagtcaa ttagttttat 360
aaaaagggtta aaattcatgg cattgtgcat tgtaaagcat aaagtanaaa ac 412

<210> 319
<211> 465
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-007-Q1-E1-D8
<400> 319

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tgaagagcgg caagtacacg ctcggtaca agaccgtcct caggaccctc aggaactcca 120
aggcaaagct tgtgatcctt gctaacaact gccctccgct ccgcaagtct gagattgagt 180
actatgctat gttggcgaag atcactgtcc accactacca tggaaacaat gttgatttgg 240
gaactgcgtg tggtaaatac ttccgagtct gctgcctgag tatcatcgac cctggcgatt 300
ccgacatcat caacgcaaca ccggctggcc agtaaacctg tgtatgccat tttcagtgtc 360
tcgtctgatg cgtcactctaa ggtggttcta gagtgtagtt cttgctggac ttgatttggg 420
cttgtgtaca tcatttatca gtcaatcaag tttgatggga ctatg 465

<210> 320
<211> 414
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-007-Q1-E1-E10
<400> 320

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cagaagaaag tcccggacaa gttgctggat gacaccagca tcacgcacct cttctcgatt 120

accaagtaca ccggttctgct tgccactggc ctcacagctg atgcgaggtc cttggtctcc 180
 caagcaagaa atgaagcagc tgagttccgt aaaaaatggg gatatgagat gcctgtggat 240
 gtattagcaa aatggatagc agacaaagca caaatataca cgcagcatgc gtacatgaga 300
 ccccttggtg ttgttgccat ggtcttgggt tacgatgaag agaaaaatgc tcagctcttc 360
 aagtgtgacc ccgcaggtca cttctttgga cacaaggcaa ctagtgccgg actg 414

<210> 321
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-E12

<400> 321

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 cggcaggaca gcttggaagc attggaagag gagggcaatg tggcaaaggc tcgttccgca 180
 ttctatcaac agcaggctcg aagatatcaa agcagagaag tatgggcca aacatataac 240
 gttggcgaac tagttctacg cctgccggac aagaaaatgg ataaattaaa gcccaaattg 300
 gagggcccct tcatcatcga ccaagtactg accggcggag cgtaccgtct acgaggcgca 360
 tcggacaacc gactcgagcc gaacccatgg aatgcagcac gcctacgaag gttctacgcc 420
 tagcaccgga ctccgtgttc 440

<210> 322
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-E5

<400> 322

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 tagatgacga tgatgatgag gaagacactg atgacgatga tgaggattcg gaggatgatg 120
 atgtgcgaga agagacagaa gaggaattcc ttgcaagata tgctgctgct ggcgagtcaa 180
 tcgaggttgt tgaggaagga gagatagatg aagaaaccca agacattgaa ctgggttccc 240

tggacgaaat ggacatacaa caagtgggtc ttctactgat tcagaaacat actgcgctcc 300
 tccaagcgca ggttttgcca gatgacctaa ttgagagaat tgcagaaaca tttcccgaat 360
 atgagcagct gttgcatgct caccaactta ggtgttagac ttgtgcagat tttattttcc 420
 aaacatgttt tctgtgttag cttttgcggc 450

<210> 323
 <211> 413
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-007-Q1-E1-E6
 <400> 323

gtaccggtac agaattcccg ggtcgacggg tggatctgat gcttgaaga cccctagtgt 60
 gtgtgtggcc gcctgataag agtggccatc gcttgggtggg cgtgggtgctg gtagtagagt 120
 aggatagtgt tcttcgggac atgcttgtaa aattaagggt tttgggtctt tttttccgct 180
 cctgtacaag tgtatttttg gatctgttgt tgtaattttc tttttctaata gacatgagca 240
 tatactttct gtcaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa atacgatata atcaaaagtt 360
 atcatatcat ccaaaataat gtcaaaaatc tgctagtcac gtaaatttaa ttc 413

<210> 324
 <211> 222
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-007-Q1-E1-F3
 <400> 324

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 tcgtcgccaa ggcagggtcta ggcgctccca gtatctatga atcctgatga aattgttcgc 120
 tcagcgacat ctgctgcat gttgccgata tgctatctcc gtatcacaca gtaactctcg 180
 cgacaaatct ggcacctcct gagaatctca gtcgcttgag tc 222

<210> 325
 <211> 360
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-F4

<400> 325

agagatacag atggagggag agggaccaac aaggtttgtg tgtgggacgc gtgcgacaga 60
actgaagatt gtcagagaga gagagagaga gatcgaggga gacggagagg gaccaacctc 120
gtttgcgtgt tagacgegtg cgacacaact gaacattatc agagacagag agagagagat 180
ggagggagac ggagatggac caacacggtc tgtgtgctgg atgcctgcga cagatccgaa 240
gattatcaca gacagagaga gagacaccga gagagggacc cacctcgtct gtgtgttgga 300
tgcgtgcgac ctaaccgacg attgtcacag agatagagag agagatagac agagagagat 360

<210> 326

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-F5

<400> 326

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gagagggtcat caggcagatc tcttgatgtt ccccatgacg ctgtctgcct cccttccttg 120
cagatttctc tgtagccatg aactttaaac tgaatggcat caacatgttc aaaggcttca 180
gaggctttca cttgctggac gaacaggaac tgacttcggg agaatttata tgatgctata 240
agaattctgc aaatgaatgc agactatgag aaccaaagga ttctcccacg gacatgtacc 300
tgtgacagca ttaatgtgcg aggggaaggg aagagggtcat atgcattccc agaataatttt 360
gaagataaat cagtttagaa gacattgacc tcatcgtgcy aagacattca ctcatagata 420
aggagttggt tccagatctg tacgaatcca gagatca 457

<210> 327

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-F8

<400> 327

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gaactcaatg gtacgatgct ggaggtggaa gacgtggcca acatggcgct gtatgtcgag 120
tcggacgagg ctaggtagct ctcaaactgc gcagagtcaa gattgatgct atggtaccat 180
taatgattcc agctgaagat atttgcaacc tgaagtgtta cacaagttta ctattgtgcc 240
aatgtgtcat catgtgtttc catgattttt gcaaaccctt aatatatccc cgggttcctt 300
ttcttctatg ctagaattgg tttggaaaaa ctgtatgcaa ctatggccat gaaattgtat 360
taagaattat gcaaggagtg agtcatcatt tcttg 395

<210> 328
<211> 357
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-007-Q1-E1-G1
<400> 328

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gtgttttctt taccaagggt ggggttccgg cgctcaagg caacatttat atggagtagt 120
gggagtgtgt nagacaagcc ggccggggtc aaaccgaatg ctgcctccc agtgaacctg 180
cgcatccgac tgctcgcatg cctaccaaag tttcacacaa ctactcgac gctcctgat 240
gacactgcgc agcgagcaac cctccgttaa atcacacacc tgcacgcacg cctccccgtc 300
tgcctgcgcg gcggactgct ancatgctga tacgtcccaa catatctata atttttg 357

<210> 329
<211> 209
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-007-Q1-E1-G3
<400> 329

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atcagcggcg acggccacgg cgacggcaag aacgactgcg accatttatt ctttttcttc 120
cttattatct aaagtgcgcg ctctacagga tccatgctta cgtttccgtg catgcgattt 180
catacctctt ctattgtgtt acctaaatt 209

<210> 330
 <211> 465
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-007-Q1-E1-G7

<400> 330

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 ggggtagagt gctggatggg tgatggagtt gcttctcgaa gatggtggga gatgcctact 120
 agacaaactt agggtagaac ttcaatatta tcaataagag tggggatgtg tttccgtgtg 180
 tgcgtgtgcg tgatagatgt gtcgggacgc atgcatggat gatgaagggg aaccatgtgt 240
 ttggtgaagca aatctaacta gatcggtaga tcaattgttg tttatcggag gaaggaagag 300
 acataactaa taggtagatc gatcgacgcg ttgggaaaaa cgagttataa cgacctagct 360
 agccatatgt atagcgggag atcggtcggt gtacatccat ttgttagagg caaacaaggc 420
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<210> 331
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-008-Q1-E1-A10

<400> 331

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 cgtccgtcca acttactgct ggaaaggagg gggttctgtg atttgacggc tcattggaca 180
 ttactgcggc gcttcgatcg gggtagtccg ccgtcactct actacggagt aatttaatgc 240
 atggctggtg gaccccgatg ctggctatcc cacacgctcg cgaaagtgag taatttagtg 300
 catggctgaa ggaggatccg cacggtangg cgtgtccact gtttttctga agaaaaaaaa 360
 tgattacagc aagcgtttcc actcttacga cggaggagtg cgaaacacgg cagccacttg 420
 aacatacaca gtgctcctac tac 443

<210> 332
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-A11

<400> 332

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 ctctgcctac gacgacgacg atgtttcgtc ctttttatgc attttcagt actcgtttta 120
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaggtaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa gggcgcccca aaaggatcaa agctaaggta agcgtgaagg caacttaaaa 240
 gatcttcaaa agggtaacca aaattaaatt aacgggccgt cgtttaaaaa gttcgtaacg 300
 ggaaaaaccc tggggttaac aaatttaaac cccttagaaa aaaaaccctt tccgcaact 360
 gggggaataa ccaaaaaggc cggaacgatg ggcctttcca aaaatttga aac 413

<210> 333
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-A12

<400> 333

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 tgatagaggt gaggaggagt ggggcgtggt ggtgactggt ggtcggactg ggcggaggca 120
 tggggatgga cggcgccggc agcggccacc atgccagatt gttccagaga cttccttttg 180
 taattgctca gcaatgaggt tgtgggagat aaggatgaac gaggcaaggc cttatctgta 240
 aatgtggaga gaggagcggg tatcttttgt aaatttgtca tagtttgctt tctatccgtc 300
 agatatagat cggacaatct atattataag atggcaggcg caccatcatc accaactcgg 360
 ttttttctct actcctactc ctataaaaga ctcatgtggt gatgatgggtg tgtctgccat 420
 ccg 423

<210> 334
 <211> 356
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-008-Q1-E1-A6

<400> 334

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cccccccagg tgcgcattga tgtccatctc ctgacacgga tatggaggag cctcttaatt  120
gccggtagag cagttcctga tatatatacct acatggtagt tgccaactta tcagccattt  180
caaggtatac catatcctgc agacagacga tttgctgctc ctgtttgtgc atgcgtacat  240
gtgcgtatgt atggttctct gaacactctg tatgatatcc taatctatct aattgtccag  300
cgtttgcctg tgcaaatactc aagcgttgag ttccatcaga atatgcacgt gaattg    356
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<210> 335

<211> 387

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-008-Q1-E1-A8

<400> 335

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accggtctag cattccccggg ccgacgggtg ccgcaaattg ttggcgccca acgtgtcgggt   60
ctgggctcat acgtggctgt gtcacgtcgt agtgacgtta ctatcctacg cctattttaga  120
gcagtgggaa tcgggcccgat ggattgtccg ataaatgggt acacagtcac ttccatctcc  180
gaaacacttg gtttcgggca tccgacgtgg gaggggacat tttgctgctt ctttcgaagt  240
ttgggacaat catcatccac gtttacccta gatactacat tcgaatccat tttgtattcc  300
tatacgactc tttatcaatc attctatgtg tatttatata tcttcacaat gatgacagcg  360
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<210> 336

<211> 415

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-008-Q1-E1-A9

<400> 336

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tcctcgccgt cgagctcacc ggacaccgcc cgaagccaag atgactactt ccaggcgcct 120
 tgctgacagg aagacatcga agttccagaa gaacatcacc aagaggggtt cgggtgcctga 180
 aaccactgtg aagaagggga atgactatcc tggtggacct atagtgttg gattcttcat 240
 ctttgtggtc atcggatcat ctctgtttca gataatcagg acagcgagca gtgggtgggat 300
 ggctgaaca ctgtcataca ttaatacagt tgcagctaaa tctgtttgat gtcgtcatag 360
 tttgtcttct taaaagtacc tagtttgaac tgatgttggt agaactgtta acaga 415

<210> 337
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-B10

<400> 337
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 cagtacgtca tgcataactc atcgattagc cggccacata ccatgcatgg agtaaacaaa 180
 agagaatgtg ctcaagacag aaacactcac caaaatggt aaggaaatag aatatcactt 240
 ttgagttcct gctttgtaag aaactgccac aggtctgcct ccatgtcggc ggggtgatgc 300
 tccaacacat atccattaac gatgtgtggg tcaatgaacc caacatcatg gatgttcctt 360
 actctgcatt ccttaatctt cattctgcat gtataatagc ggacacaaca atatagttag 420
 gacatatata tagtgc 436

<210> 338
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-B12

<400> 338
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 gtgaggagaa tggcgaggat gatgaggaag aacaagagga gcaggagggt ggaggaggcg 180

acgatgatga cgacgacgac gacgatgaca atgaggagga cgacgatgat gacgatgatg 240
 tcgctgctga agacgatgaa gatggagtag aagaggagga tgacgaccag gacaacgacg 300
 atgatgagga ggaggacgac gaggactcgc tccagcccc caagaagagg aagaagtga 360
 gcccttcgat gccggctgct ttagtcacca tgcgatgaga tgtg 404

<210> 339
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-008-Q1-E1-B3
 <400> 339

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 gtccatgaaa cgggagtggg tgtacgggac gttccgacag ttgaatatat gagcacgtta 120
 ctacgagatt tactacaata taaatcatga cggctataac atagattaaa ctaatcatgc 180
 ggactagcat agtagatgaa cacatcaa atcaggacaca gactatacac atgaattcta 240
 ccacgatttc gaacaggaag gacagacaca cataccgtgc aacaggagca gcaccattgg 300
 cggtgaggtt gtcgccccatg ccgttgagga agaggttgcc gacgtctggg aagaagtcgt 360
 cggttggtgaa gtcgtcgctg ctagcactcg caagagtga ct 402

<210> 340
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-008-Q1-E1-B4
 <400> 340

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 agagtgggtcc tgtgaagact acagttactg gtgttgagat gttcataaag atgatggatc 180
 atggagatgc tggtgacaat gttggtcttc ttctccgtgg tcttaatcgt agtgatgtca 240
 atcgtggcca gatggtttgc aaaaccggta ctgtgaagac ctacagaaag tttgaagcgg 300
 aaatttacgt ccttaccaag gatgaacgtg gtcgccacac tgcattcttc tcgaattaca 360

gcccacagtt ctacttcacg acagctgata tctgtgggaa aa

402

<210> 341

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-B6

<400> 341

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cttttaggca ttataaaaac tttcatataa gtgcattgaa tactaagaga agtttgatac 120

ttgataattg ttttgagata tggagatggg gatattagag tcatgctagt tgagtagttg 180

tgaatttgag aaatacttgt gttgaagttt gtgattcccg tagcatgcac gtatggtgaa 240

ctgttatgtg atgaagtcgg agcatgattt atttattgat tgccttcctt atgagtggcg 300

gtcggggatg agcgattgtc ttttcctacc aatctatccc cctaggagca tgatgcacgt 360

agtactttct ttcaataact aatagatttt tgcaataagt atgtgaattc tttatgacta 420

atgttgagtc aatgg 435

<210> 342

<211> 405

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-008-Q1-E1-B8

<400> 342

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cagcgagcgt gtcgtgcagg tcagccgagt caccaagggtc gtcaaggggtg ggaggcagct 120

ctcctaccgc gccctagtcg tggtcggcga catgaaggga cacgttggtg ttggcgtcgg 180

caaggccaaa gaagtctcag aggccatcac caaggctgcc atgaacggcc gccgcaatct 240

cgttacagtg ccaactaacca agtactgcac cttcccgcac agagctgagg cgaactatgg 300

agcagcgaag gtcatgctga ggctgcttg ccctggatct ggtgtcactg cangtggagc 360

tgtgaggggtt gtgctggaga tggctggagt aganaatgct cttgg 405

<210> 343.
 <211> 409
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-008-Q1-E1-B9

<400> 343

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 gatgttcaag caggccggca agttaagcgc cgaagacaaa gataaggggc tacatagcga 180
 tgacgaggag gagccccggc agccgaacac ccgagggcag aagagggttcc cccaacaagt 240
 gcggacggtg aacatgatat acgcaacca catccctaag agggagcggg agcgtgcggt 300
 aagggatgta tacgtgttg agccagtcgc ccaaagttc aacccatggt cctcctgtcc 360
 gatcaccttc aatcgtangg accatcccac tagtatccgt catggcgga 409

<210> 344
 <211> 453
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-008-Q1-E1-C10

<400> 344

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 gtccagatag gctctccac aaagagccgc attgccttga ttagttgtc actatccaat 120
 gtaaagcggg gatacattcc tgcaggcaaa acaatcatgc cacctttctt aactgctata 180
 cggatccact gttcgttttg gtcctcaca tcaaagtatc cactgccctc gagacaatag 240
 cgtatctctt catcagtatg caagtgtct tcaaagaagt tcttcagctt ggcctcatag 300
 tttggcaact tctctgggca tacgtcgcaa atgtccacat aagagtatcc cctggcctca 360
 cggattttct tgagattctc gtctttctcc cagtcacag cattcagggt ccagcttaca 420
 acaccaatt ctgaaagttt ggcaagagga atg 453

<210> 345
 <211> 439

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-008-Q1-E1-C12

 <400> 345

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 gccggcgggcg aggggaagac gaggggcagg aagaaggga gcaaggccaa gaagagcgtg 120
 gagacgtaca agatctacat cttcaagggtg ctgaagcagg tgcacccaga cgtgggcatc 180
 tcctccaagg ccatgtccat catgaactcc ttcataacg acatcttcga gaagctcgcc 240
 ggggagtcgg ccaagctcgc ccgctacaac aagaagccca ccatcacgtc ccgggagatc 300
 cagacctctg tgcgcctcgt cctccccggg gagctcgcca agcacgccgt ctccgagggc 360
 accaaggccg tcaccaagtt cacctcctcc tagacaactt aggcttgatc ctcgctcgctt 420
 catgcgttct gtaagtacg 439

<210> 346
 <211> 391
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-008-Q1-E1-C5

 <400> 346

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 cccctggatc gtcttttagg ttttaaaaaa ataaaaggaa atgataaaag attaaaaaaa 120
 ttcaaaaaaa tagatgcccc tgtgttatgt gtcctatttg ttaggaaaat taacaaacat 180
 gaattttgaa tttttttgca aaaggccgcg tgtttcggta aaatggccgt aacttttgca 240
 tacgacctcc gatgaaaaag tttttttata tgaaaaatca tctacttgaa aagttacatc 300
 caaattcaat tagggggaca ctatgggaga tttttagaat ccctaaaaac ctgacagaat 360
 aaaagatacg gggcttttaa gatctggagg c 391

<210> 347
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-008-Q1-E1-C7

<400> 347

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tatatgatac ctggggccct ggggggggag atgtaagaaa aattaccaat ttgaccctta 120
gtcccagtgt tatatttgggt tatttactaa aatctccttt tgggtggagaa ggggtggattg 180
ttagtgtaga tgatttagaa gatataattg gtgggcatgt atggttgggt tttatttgtg 240
tatttggcgg aatttggcat attttaacca aacccttcgc atgggctcgc cgtgcatttg 300
tatgggtctgg agaagcttac ttgtcttata gtttagctgc tttatctgtc tttgggtttta 360
tcgcttggtg ttttgtatgg ttcaataata cagcttatcc gagtgagitt tatggaccca 420
ccggg 425

<210> 348

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-C9

<400> 348

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agctcgaggc ccgcgccgtc ggctcaagg tcgtctgccc catctgcaag tctcaactgg 120
ccaacgagaa gcagttgatt gatcactatg gatcaaagca tccaaggag aaacctccag 180
gtccatcaaa tgcagagtga ctgatgcgag gcggaagcat gagctatact ttgactgttt 240
ctgaggggttt ttcaatctgc tccacactcg gacgacttga gcctcagctt taccctatgt 300
aatgcatgca tttccccttg ttccaggcaa gaaccttgat gagcatgtat ttgccttata 360
tgagtatctt gtcaaactgt cagcatacct tcaaactgta t 401

<210> 349

<211> 397

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-008-Q1-E1-D1

<400> 349

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atgttgagca gcagaatgcc caagggtgcat atagttctac agaagagggtg aaggaggaag 120
taaagtgcatt caaagccatt atagagaggc tgatacagag ggaaggccat cttgtagtca 180
tagacgaagg aacagcggca gcagaagggtg ctgcagcaag ggcatcggag cacagaatcc 240
tggtctgtaa cccgaactac gtcattgatt gattaaccag ctgaggacac agctaactag 300
atccatcata tgtggttgac caatagagca gacattcaaa cggaagacat cctgttggtca 360
tatgctctag aaacgatatg ttgtacctgc catcccc 397

<210> 350
<211> 449
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-008-Q1-E1-D10
<400> 350

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gtgattgcga ggaagttggt agtggcagtg atcatgatag ttctccagag ggccaagtaa 120
cttctgtaga accggccata gacggagaaa caggggaaga caagcttata aaccaagatt 180
cactgaagtt gatcgatcaa gaaatgtctg ctcttcctaa gtcaccaaca aagcctagta 240
tgtctggatc agagaagtct aagcgtactg ttctcaacc attcacactt tcaactcaaa 300
gaaggggtctc tgggtggagga aatgggtgggtg ttgctcatcc atccagtaat ggagaaaaat 360
ctgggcaagg aagtagtgcc tctccagcaa gcatgataaa gaagagtact ctggtgacac 420
ccaagaagat gtcacaacct ggccttaca 449

<210> 351
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-008-Q1-E1-D11
<400> 351

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tcgcatacaa cgcgctcctc caggctcacg cggagatcga caccgccacc cggaagccca 120

gcctcctcgc catcctcgca aggcacttct tcccacagct gtcggccaac gtcggggcgg 180
 ggggtgcagct ggagaggggc aacatcttca ggtacaccct ccgggccaag aaggccgtct 240
 cattcaccga cgacggcctc ctccggcctca acatcaaggg acgcctcctc gcagacaaga 300
 acttcaagcc gaggaggaag agcggcgccg tcgagctcgc ctggaccata ctgcacttca 360
 gaaggggcca ggacgtcagg atcaaggccg gatacgagct ctaccgaaag atgcc 415

<210> 352
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-D12

<400> 352

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 ggacatgaag ctccagggatg accttgagag gctcaagaag atcaggaacc atcgtggtct 120
 gcgtcactac tgggggtgtgc gtgtccgagg tcagcacacc aagactaccg gcaggagagg 180
 aaagactggt ggtgtctcca agaagcgata agctgcttca caaagattcc tcatagcttt 240
 gctactactg tggttggtcca tttccagaat cttaggaggag tggttcttatt tagatgatta 300
 ccttggaatga tggtttgccc tagataatgt tttggttctg gaacctttaaa tatattgtat 360
 cttgaattct ttgttgaact cgtacaagag tttgttttga taaaaaaaaa aaaaaaaaaa 420
 aaaaaaaaaa gcggccgctc taaaggatcc aagcttacg 459

<210> 353
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-D2

<400> 353

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 aatttgaatt gttcacctga aatggctaca atacatttca atgtcatata atgttcattc 120
 atatccggaa aaaatccact tcgtttacga cacacatata gttgcatgtt ccccccaaat 180
 ctaagggtcga gcacttcata catcatcgat tgccgctgtg accccatgat gtacctcata 240

gattgattag atttcatgct agatctcaac aatttactat cagcatcgtg tgacatgtgt 300
 tacagtgtat cttggtgcat catcagtgtg tagtacgcat atagcctacg cgagacagtg 360
 cgtcggctac attccacatt cagcgtgtca agcacactat ctcg 404

<210> 354
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-008-Q1-E1-D5
 <400> 354

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 gtccaaggag gccggcgggc aggggaagca gcggggcagg aagaagggca gcaaggccaa 120
 gaagggcgtg gagacgtaca agatctacat cttcaagggtg ctcaagcagg tgcaccccga 180
 cgtgggcatt tctccaagg ccatgtccat catgaactcc ttcacacacg acatcttcga 240
 gaagctcgcc ggcgagtcgg ccaagctggc gaggtacaac aagaagccca ccatcacgtc 300
 ccgggagatc cagacctcgg tccgcctcgt cctccccggc gagctcgcca agcacgccgt 360
 ctccgagggc accaaggccg tcaccaagtt cacctcatcc t 401

<210> 355
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-008-Q1-E1-D6
 <400> 355

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 gaaccgtggt aacttaccat aacaacaact caattcctat cgaattccta tagtggaatt 120
 cctataggat agaacatata cagggtgtac gcattatata tgaatgaaac atattcatta 180
 acctaagcat gccctcaatt ttctttaatg agttgatatt atattaattg aatattcctt 240
 ttgttttacg agatttttgc taaagtttca tttacgccta attaacatcg agtagaccct 300
 gttattgtga gaattcttaa ttcaagagtt atagggaggg acttatgtca ccacaaacag 360
 aaactaaagc aagtgttgga tttaaagctg gtgttaaaga 400

<210> 356
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-D7

<400> 356

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 gagaagctca tccccaaatt tgctctcctg gcaatgagag gcctgccact cccggtttat 180
 gggaatggct cgaatgccag gagctacttg tactgtgagg atgtcgcaga agcctttgat 240
 gttgttcttc acagatgaga ggttgggcat gtgtataaca tcgccgcggc taatgagagg 300
 ggagtggtag atgtggccag ggacatatgt gagattcttg gggtaggacc tgagaaggcc 360
 atcaagttag tggatgacag gccgttcaat gagcataggt actttgtgga cggtagagaag 420
 atgacgaggc tgggggt 436

<210> 357
 <211> 310
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-D9

<400> 357

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 ggtgctagta agttgctagt agacaccttg taattgggtgc tagttggttt aattgggtgga 180
 agatcatatg ttcagatcct atatgcatat tattatccct ttgattatga acatgaatat 240
 gctttgtgag taaatacatt cgctcctgag gacaagagag aaatcttgcg atgagtagtc 300
 acgtgaaatt 310

<210> 358
 <211> 381
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-008-Q1-E1-E1

<400> 358

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 tcgtctctgt ctggtcgccc tctcgtgctc caccatgcag ccgcctcttc ctctcttatt 180
 ccctcctacc gtggttccgg atcgggtgca ggccgtcata ctggagagca tgagcgtcaa 240
 ggtcttaatg gtggggtgga gatgcanggg aggtanggat gtcggatgga tctgacgcct 300
 gctggctaaa gcagcaggag ttggcagagc gacggatgcg gacgcggtca tcaacagggg 360
 ttgcaagaga aggagctcaa g 381

<210> 359
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-E12

<400> 359

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 cgagcgagag agagaggaag cggaagcaag aagatggggc aggcgctgcg caggctcttc 180
 gactccttcg tctccaccaa ggagatgagg gttgtgatgc ttggtttgga ttcagctggc 240
 aaaacaacaa tcttgtatag gctgcacctg ggggaggttc ttcaaactgt gcctacagta 300
 ggttttaatg tcgagaaggt tcagtacaag aatgtggcat ttactgtgtg ggatgttggt 360
 ggacaagaaa agctcagaca attatggacg atgtacctca gcaattctga tgcactgatc 420
 caggttg 427

<210> 360
 <211> 388
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-E2

<400> 360

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gtgaggagaa tggcgaggat gatgaggaag aacaagagga gcaggacggt ggaggagggtg 180
acgacgatga tgatgacgac gacaacgacg atgacaatga ggacgacgac gatgatgacg 240
atgatgtcgc tgctgaagac gatggacatg gagtataaga ggaggatgat gacgatgagg 300
atgatgagga cgatgaggac ttgctccagc ccccgaaaga caggaagaag tgaagccctt 360
cgacgcggct gctttagtca ccatgcga 388

<210> 361
<211> 429
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-008-Q1-E1-E5
<400> 361

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cgaactctgt cgagaagggc tacgattcga gctgcaagac atatgtctcg gttattgtcc 180
tcggagatga agcatgatat atttaccaaa agtactcttg ttcacttaca gctcggtgga 240
gggctgaccc ccttgcgggc agtgcggtaa gaacgccctc cggggcaggg cccctgacg 300
aaggtttctt cctcggttg gaaaccctcg tttccaagtc ttcagaggcg gtccttttcc 360
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taattcccc 429

<210> 362
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-008-Q1-E1-E6
<400> 362

taccggtcag gaattcccg gtcgacgggt cctttattta caggagacga tgaagagaag 60
attctctcct agtttcttta gtaagatcga tccttatggg acttttgact ggaactggat 120

cccttcgatt ggcaaggctg ggggtctcct ctgtgcggtc aagagacaac atctggaagt 180
 ttttttcgtg gtccttgggg aaatcttagc cttcatgtta ctatcttcga tgtaaaaaaa 240
 acagtgtgtt tgggtctttgc ttaatgtgta tgggtgcagcc catgatgagt ccatacatga 300
 attccttgag gaattggcca actattgtat ccacttatca atgccttaca ttgtgggtgg 360
 tgatttcaac atccttagac actagtggg 389

<210> 363
 <211> 410
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-E7

<400> 363

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 aactcgcccc gctaccgcag ccgccacaca cgacgaacac cggaacgaag cagatcggcg 120
 gcgcgtcact ccaatcaccg gttcataaaa tggcgacggt ttcggattct ctggtctggg 180
 agtcgctcag gaagaacaac tgcttctga tcaagcagtt cggcaacagc aatgccaagg 240
 tccagttcag caaggagccc aacaacctct acaatgtcca ctctacaag tactctggcc 300
 tggcaaacia gaagactgtg acagtgcagc cagctgctga gaaggagatg actgtgggtcc 360
 tctccacaac caagtcaaag aagcagaaca agcctgccgc gttcaaccac 410

<210> 364
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-E8

<400> 364

acggtcagga attccccgggc tcgacggggc cctcaaggat aacagggagc atccatcgaa 60
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 ccataccac agagattgtt gggttttcaa acaatccggc atactcaatg ccgaacacaa 180
 ggggctcgac aactaagag aaggcgagga cgaaccccaa aagcagagca ccaggaaaca 240
 aaagaacttc ccacaagaag taaaaacagt gaacttactt cacataacaa aacgtgcggc 300

gcccataaag gtatgcaaca cacggtctat ccccaaaggg tcccgccact ggttgcaaaa 360
 accaatcatc ttcgatcagc tagattattc tagaaatatac aagaatgcag gctggactgc 420
 cttgataactt gatccaataa ttggcggact 450

<210> 365
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-008-Q1-E1-E9
 <400> 365

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 agcaggatgc tgtcaatggg aagccaaagt cgctgtagc gaatggtgtt aacggggatg 120
 cgaaggttcc ggcagagaaa gctgctgcca ccgctgtctc tccagccgtt acctacgcgg 180
 cgaaggtggc ccaaacagca gcgcccgaga agaagcctgc ggcgaccgag aagaagcctg 240
 tcgttgccaa cggtgctgtc aagaccggtg tagctgcttg atcgcatacc cgatcctccc 300
 agctagccat gaagaacaaa cggacggtgc tggcgaacca ggcgagacat gcgggggtccc 360
 aaggtactga tcaccaaagg tggctgctgg aaagcgggtc ggatagttag gtttccttag 420
 ctctcccctt tttcctct 439

<210> 366
 <211> 345
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-008-Q1-E1-F6
 <400> 366

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 tgttccttct ggtagcatc agatcagatg tgaatatact tgacgagttg attaatttag 120
 aggacgctgg tggccctgta ctaaggtgtc cgtttatatg ttggtctgca tatctatgca 180
 caatacgatt ggaatgaccg ggggttcact tcatagtttt ggatgaaaaa tgttggtctt 240
 gggatatctg gcgtacagct gggcacatga tgagttccag aatgttatgt ttatgtattg 300
 gtgccagttt tgttgacgtt ctgttaattc cgttgcgttg atcga 345

<210> 367
 <211> 428
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-008-Q1-E1-F7

 <400> 367

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accggtctac aattcccggg ccgaagggag atggaggtaa ctcgatctca tgtgaggaat 60
tcaatgtgtc gttggacaca ttgaaaacct ccatgacaac cgaggtcaag gacatgttta 120
aggaattctt agaagggctt aaactttcca ccgcgcccgt gaaagtgggt gatcccgcca 180
acacggtgac ggatgctaac cccaaaaagg gggaagctac tagtgagaaa gtcctgttgt 240
ctagtgttaa aaatggcacc ggcattcttg cccatgtgga acctccaatt tatggagggc 300
cgattccctc tactcattta aatcatgtcg gtcctcctcc taagtatgag aaacatgaag 360
attttgattc ttgggtttat cgcttcaagc gtcatttana acatgtgaat actaaccttt 420
ggagaatc 428
  
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<210> 368
 <211> 400
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-008-Q1-E1-F8

 <400> 368

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ggaaatgcc agggtgacat gaatggaaca aacagctccg acgatggcgt gtccgacata 120
gagtccgtcc tcgagcagct gaagaaggag cttgggtcca gctgaacggt tgcctgtcgg 180
ctgcatacga cgggggcaac tgcggccacc ttgatcggtta ccaaccggt gttcatatgg 240
agggtccgtg ttctcccga tcgatggcgg taatggtacg tactaccaga tggtgtaatt 300
tagctggtat agctttccgg tggggcgacg gatccagcgt tttgcagaat gttttgttc 360
ttggttcgta gggctgcagt ttgttatgga cagagaagag 400
  
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<210> 369

<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-F9

<400> 369

aattcccggg tcgacgggac atcttcacca agccattgcc ttgcccacag ttgagactt 60
gcaggcgcaa tcttaccctt ctagattcat taaaaagtgg ctaagattga gggagggtgt 120
tagactgtat ttacatgtgt atattgtaac gttgtatacc acctcattat atatatatgt 180
gataggccac ccctagaggg ttgtgccggt tccccccaaa gcctattgtc ttacactggg 240
caatgatggt gcctggcgtg gacatggaag ctgcatattt ttctgcctgg tcaggcagcc 300
tagcatgaca actgtttggt tatagcctga aagctattag tactagaaaa aacaatttgt 360
ggggtcatct accccactgt actttatagc ccaggcagcc accaggcgct tgaatac 417

<210> 370
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-G11

<400> 370

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tgctgaacga atgttcaatg ctcatcatgg acgaggcaga caagctgtta gctcctgagt 120
ttcagccttc cgtggagcaa ctcatcgtt accttcagc tagtcggcaa ctattgctgt 180
tttctgcaac ctttctgtta actgtcaagg attttaagca gaagtaccta cctagacctt 240
atgttattaa tctgatggat gaactaacac tgaaaggaat cacacaatac tatgccttcg 300
tagaagaaag gcaaaagggt cattgtctga acacgctttt ttcaaagctt caaataaatc 360
agtctattat attctgcaac tctgttaata gagtcgagct actggcaaag aaaatcactg 420

<210> 371
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-G6

<400> 371

gtaccggtca ggaattcccc ggccgacggg gagctaaagt ggctgaatcc tgacaacaat 60
catgagctat tatgggatta tagcatgtgt gctgaaacga gtcgtggggc tgcgatccgt 120
gatttgattg ccagagcctt aaaaggtcca cttgtacctg ctcaacagga gcaagttgtt 180
atagaattgg tgaaggactc taagctagtc tatcactgtg ggatgactcc acagaaactt 240
ccagaccttg ttgagcataa tccactcatt gctgtagagc ttctttcgaa gcttatgaac 300
tctcctgaca ttgcaggtta ttttgatgtt cttgtgcaca tggagatgag cctgcattcg 360
atggaagttg taaacagact tactactgcg gttgaactcc cgacaggatt tgtccacgaa 420
tacatctcaa attgtattca atcttgt 447

<210> 372

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-G7

<400> 372

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gagtacggtg gtccgaaatc agatgtgctc tgcccgtgta gcagttgtat gaattcagtt 120
acatgacccc agtcaattgt gcaaagtcac ctacacttgt atgggatgtc ggtcacatat 180
actaggtggg ttcacatggt tgaagctgtg aacgtcaatg ttactaacta tgtggaagca 240
gcagatcacc atcttgatca gcctgatgct caggtggaag aggaggagga cgaggagggtg 300
ctggcggcag agccagtgag tttgaccaac attgaaacaa ttcgacgaaa tgcttgaca 360
tttcgtgaag tttcacttgc agaaaaacaa tg 392

<210> 373

<211> 144

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-H10

<400> 373

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tcccttgccct ttgtggtaga tctt 144

<210> 374
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-H11

<400> 374

attcccgggt cgacggggac cgtaagagt cgcacaagaa aagtgtcgcc cggctccttg 60
gccctcctcc tccggcggtg ctgccgtcgt gagcgagcat ggggaaggta gccaggctctc 120
tcctccgtca agtaggtgta agattaggtt taggactgag tctaggtttg tctctgtggc 180
gtttgacgtg atgtcgagtt ggagcttcgt ccaggcgctcc tcgagcagcg cctggcggct 240
ggttctctcc cgaggtgagc tcccatggtg gaagttgaca gcgggtggta gatctgggtga 300
tagcttcctt aataagctcg aatctttccc tgatctggag gatctccgtc gccttggtcc 360
atttgttcgt cgctgtcgtg gagatgggga cagaaag 397

<210> 375
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-H5

<400> 375

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tggtgttgtt cccctgattc tgattctgga ctagcaactg cattaatgtg ttctgctgct 120
ggatcaactg agtgagctcc ggtgggaagg taaatctggg gtcacatctc ggaggcatct 180
gaggggttta gaatagatga gatttaagaa tagagagggg gtctaaagag aaaacactac 240
ccatatgcac atgaggcaaa agcaacaat tcacttcatt caatcaaaca agggcatata 300
atcgggtctaa ctatcgcaaa agtgctcgga ctactatatt tacatgggtg actactactg 360
ttgggggtgt ctactagaaa tattcttcgg ttgcagactc catgatattc gctccagctt 420
catcaacata at 432

<210> 376
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-008-Q1-E1-H7

<400> 376

ccggtcagga attccccgggc cgacgggtgc cccagaaggc atccccctctt tcttcaacaa 60
 gtatcagtat gttttcgtat tcgtttcggt catgcaatat gtgcaagtct tggagcgtct 120
 tttgcattta gttttcactt ttcttttatg caccgtgctg gtatgagata gtccttggtt 180
 gatttataga atgctcattg cacttcactt aaatcttttg agtgtggcct tatagaatgc 240
 ttcattgtgt tcacttatat catttgaagt ctggattgtc tgtttctctt tccatagaaa 300
 actgccattt gtagaatgct cttttgcttc acttatattt gtttagagcg gggcatatct 360
 tttgtagaaa taattaaact ctcttgcttc acttatatct attaagagag atgacacgaa 420
 ttggtcaatc 430

<210> 377
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-A2

<400> 377

gggtccagaat tcacgggtcg acggcaatag ataaatacca cacgtccatc aatttattta 60
 ctaatttctg gaggtccata agtatacgtc tgatccatat tactacagac tgttctgttt 120
 ttgacagatt ctgtttttcg tgtgttggtt gcctactttg atgaatctat ggctactatc 180
 ggggggtatg aaccatagag aagttggaat atagtacgtc taacacttac aacttggaat 240
 gggttcatta cactgccttt aactgggat ttgttttctt agacgtactg agctcatcag 300
 attttctggt taagttttgt gttgtgaagt tttcaagttt ttgggtaacg acttgacgga 360
 ttttggaata tcaactggca ttcaccttaa cctgggga 398

<210> 378
 <211> 352
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-A6

<400> 378

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attccccgggt cgacgggatg aagcagggct actaggccgc tgggtgttga tgctaattaa 60
cgtgaaatcc ttgctagttt atatctgatg tctgaactgc ggtacaaaga aatgaactca 120
tggattgtcg atgagtctga actcgtagag tatctgcatg tgcgaccggg attgcgtatg 180
aatgtacact tgatgcgcct gctaactgaa ttgctcgccc ttgtgaggtt ggatagaggg 240
tacggaccga gtttgaagca gtccatggat tattttgtac tgtactacat gaattttacg 300
ccaatgtaat gtaaccaact taaacgggtc ggactttatt tgcctagcga aa 352
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<210> 379

<211> 453

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-A8

<400> 379

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aggctttaag tttggaggag ctaccgaaac gtgctgtgat tcttgggtggc ggatatattg 120
ctgatgaatt tgcttctatc tggaaggggt tgggtgctga agtagatcta ttttatagga 180
aagaacttcc tctaaggggt tttgatgatg agatgagaac agttgttgca agtaaccttg 240
aaggaagggg aatccgattg catccaggga caaatttgac cgagttgagt aaaacagccg 300
atggcaatta aattgtgaca gataaagggg atgagctcat tgcaaagtgt ggtccttttg 360
ctacaagtcg tgcgccccaa ctcaaatagg ctgaacctgg aagctgttgg tggttaaggt 420
tgatcaaata agagccatca aagttgatga ata 453
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<210> 380

<211> 399

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-B1

<400> 380

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 aggggagacg gtctgacgag gaggccgggg acgactcggt ctggccagag ctgaggcaat 120
 tggcggcggc gaactcctgc ggagctccat ctccggcgca tggcgtgacc taccggggtc 180
 ctggaaggca gcgcatggga ggcggcggac gggacagtgc gggcaggagg tgtctgcgtg 240
 gctgcaggga agctggagga ggacgtgggt gtcggtgtca aaaccggcgg atctcgggta 300
 gggggtcccg aactgtgcgt ctaggccgga tggtaacagg aggcaaggga cacgaagttt 360
 taccaggtt cgggccctct cgatggaggt aaaacccta 399

<210> 381
 <211> 365
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-B2
 <400> 381

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 gaaactagta ctactatggt gttgcaaaaa acaccaacac cggcacaaaa aaaagacgga 180
 cccccaaaag gttcaacctt acatacgact tgaagcgaag tccaaacccc tccaaaatgt 240
 ccccgaaaat caattcaaag gccggacgat taaaaggcc tcaatgggaa aaacctggga 300
 ttacccaaac taagcccctt tcaataaatc ccccttccc caactggggt tataacgaac 360
 aaggc 365

<210> 382
 <211> 394
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-B3
 <400> 382

ttcacgggtc gacggcggat acacttactc atcatgccgc agctcgtagc aagcgccgca 60
 cgtgacgccg ccatgtcaag gcgctggatg ggatgattgg ctggaaacta attccggatg 120
 tctcttggtc tgccctgtgt accgactgtt aactgcgcca acaatacggg cgccaagaac 180

ctgtacatca tctccttgaa tggcatcaag ggaaggctca accacctgcc gtccgcttgc 240
 ttcagccaca tggatcatggc caccatcaat aatgggaatc cggacctcac gaataaggtc 300
 atgccagcgg tcatcgtgct ccagcgcagg ccatggcacc aaaaggacga tgtcctcatg 360
 tacttcgaat ataatgctgc ggggtgattgt gaat 394

<210> 383
 <211> 357
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-B6

<400> 383
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 gcatgcacgt agtacttgat ttttgatggc ttcgaaattt ttgcaataag tatatgagtt 120
 cttttgacta atgttgagtc catggattat acgcagtctc acctttccgc ctttgctagc 180
 ctctttggta ccatgcattg cccttttctc ccttgagagt tggtgcaaac ttcgccggtg 240
 catccaaacc gcgtgatacg atacactcta tcacacatat acctccttag atcttctctc 300
 aaacagccac catacctacc tatcatggca ttttcatagc cattcggaga ttatatg 357

<210> 384
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-B7

<400> 384
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 tcatggatca caaacacaga actcagttcc tgaggacggc tacaatgaga caaccaccca 120
 tgtactcta catggcctct caccgctacc tttaccaa atcgtgttcaca cacttagctc 180
 acacacagta ggacatgttc acacgcctct gattcatccc cgatgaatca gacctgactc 240
 aactctaagc agtagcaggc atgacaaata agcatgaagc ggggggtgtac ttcttcatac 300
 atgtttccac cacttagcgt ctgcacacga catgtgctcg gcagacttca agcgaaagcc 360
 gacgtgggtg tagaccacga cctacctaaa cactcaagtc tctagtccag gtttatcgcc 420

tattcgggtt ccatcca

437

<210> 385
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-B8

<400> 385

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gtacacgtta tgggtgccagt ttgcgtaagc agatcaagaa gatggagggtg tctcagcact 120
ccaagtactt ctgtgagttc tgcgggaagt ttgctgtgaa gaggaagca gttggaattt 180
ggggatgcaa ggactgtggg aagggtgaagg ctggcgggtgc ttacaccatg aacactgcc 240
gtgcagtcac tgtcaggagc accatccgtc gcttgaggga gcagactgaa gcataagttg 300
ctaacagcag tgttttgtcc taaggaatta tctgtttttt tgcagtttag acgatacttt 360
ggattcagtt ctgttggctg tttagtcaag ggtatctttg tacttgggtgc catggatggt 420
t 421

<210> 386
<211> 256
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-C1

<400> 386

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cgctatgcaa acgtactctt tatggaaaca gacgaagagc tcgatgctct tccttgtcac 120
catccagcag catctgtcat atctctcact catgactatc ttcaagacat gtcaaactct 180
acaactcatt aatacctgtt gtagcaccca tgccatacca tgttcaaatt caggataggc 240
aacgtgactc tcattc 256

<210> 387
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-C2

<400> 387

gggccagaat tcccgggtcg acgggaatcc tgaacacgga ggacgtgtac gagggcatggg 60
gcacattccg tggaaaatag ggttccccca gaacgatgac ctgtacgggtt acagaagccg 120
gaagagaaaag atggatcggg aagcagatgt tgtggcgcggtt ttggcatcgg aaatggatgt 180
gatgaagaaa accgtgagtg tactagtagc cgaacgagat gcagctcggg cgcagcatga 240
agatcatcca gcggatctca gaagccagca gcggagaagc agtgtggctt ccacggaggc 300
cccaccggct ggtgcagatg caccgacgat cgaaattact gcaccggagc ctctgggtgtt 360
cgaaattact gcaccggagc ctctcgcta ccccggtggac gatataaagg agatgaaaga 420
atgtcat 427

<210> 388

<211> 451

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-C4

<400> 388

tgccggtcca gaattcacgg gtcgacggga ttagctatcc cctcttatt ctggcattct 60
gcagttcagt ccaccgatat ggccctttac actatatcca tgcataatgta gtgtagctcc 120
ttgcttgcca gtactttgga tgagtactca cggttgcttt tctccctctt tccccccctt 180
acctttctac ctggttgtcg caaccagagg ctggagccca ggagacagac gcagggccgt 240
ctccagtaat ttggggggccc gggacaaaat acaaaatggg gtcctaaatt tttttaaat 300
catataacaa aagaagtatc caaagaatat ctacactacc aaaataatac ctctctatcc 360
gaggaacgca tcatgcccaa agcatacata aatttgctcg attgcacaat atatgtggac 420
ctaaactcaa tgcttagcaa tggaatcaaa t 451

<210> 389

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-C6

<400> 389

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tcaatgcatc tatggctaata aaactaattt ataaacgata aggaagttgg aatacagtag 120
gtttaacaca gaaataaata aataatgagt tcattgcagt accttatgtg gtgggttttgt 180
tttctttcac taacggagct tataagattt cctgttgagt tttgtgttg gaagttttca 240
agttttgggt aaagctttta tggactatgg aataaagggt ggcaagagcc taagcttggg 300
gatgcccattg gcaccccaat atattcaaga gtagtcaaaa gcctaagctt ggggatgccc 360
cgggatagaa tccccctttt cgtcttcggt cattggtaac tttacttga gctatatttt 420
tattcccaca tgatatgtgt tttgc 445

<210> 390

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-C7

<400> 390

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agcagggtgca ccccgacatc ggcatctcct ccaaggccat gtccatcatg aactccttca 180
tcaacgacat ctctgagaag ctgcgggagc aggcgcaa gctggcgagg tacaacaaga 240
agccaacat caggtcccg gagatccaga cctccgtccg cctcgtctc cccggcgagg 300
tcgccaagca cgccgtctcc gagggcacca aggctgtcac caagttcacc tcctcttagg 360
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<210> 391

<211> 457

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-C8

<400> 391

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atatgaattc ttacttttcg atcgtttttc ttttaacatt ccatgttttc tgcagtgaca 120
 cacgttgac gtcatectc ctaagcccca aatattccat ggccacgtat ttcgaccggg 180
 accgtcagtc gaacgtagac tacacaaatg tcaagaaggt tcttgatgat gttctccccg 240
 gctacgcca atctggaggc accttcacca ggctatttcg taagtacggc aagcacgtgt 300
 tctcccacaa tacgacgttc tgctgcgtca agcagccgcc tggcggtcag aagggtgcct 360
 actacgcat ccatcacatg cgggcgatcg tacgggacca tcatcaactt ctgctaccga 420
 gtaaactcca agattggggc gcgagcgtgt cggaat 457

<210> 392
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-D1

<400> 392
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 agggactgcc aggccatggt ggaattcgcg gcaaagcacg gcataccgc ggaggtggag 180
 gtgatcaaga tggactacgt caacacggcg ctcgagcggc tcgcaagaa cgacgtccgc 240
 taccgcttcg tcatcgacat cgcaggcagc ctcggctcaa cctcgtgagc tggaatagcc 300
 accttggtga tggttgcgtt agtttgcttc ggcgaacgcg tgcagattta gagcttttag 360
 taactgtacc cgttgagtaa attgcaaaaa aacattataa ttggcgaccc taattcaaaa 420
 a 421

<210> 393
 <211> 364
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-D2

<400> 393
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gccgaatgaa ggatttttgc tgccttgaga aattgtctgc ctatcacagg atcatgcata 180
 aggtctatgt gatacttaga tgtatttgtc aagtgttcta aaatgctgtc cttgtgccta 240
 aattcacgtc tgtcacggtc agcatcatcg cagggtctcaa tggctaacta cgggcatcaa 300
 gcgaaaccac ctgtttgaag gcatacctaag tttacttctg tgaaccctta catatgtacc 360
 tggt 364

<210> 394
 <211> 301
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-D3
 <400> 394

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 ctcgttgttt ttgcaagcta gcatgtgact ccgggatgcc tgttttaaga tttcgcttgt 120
 gttgaaagat attattattt actgcttgta gcctacctga gataccatca tattttgctg 180
 attatggaac tactttttatc ctgcttaaaa caaaagtatt aaaaaaaaaag taacttaaaa 240
 atcaaatcaa atccaacaaa gcaaaaaaca taaaaatcac aaaaaagtaa ctaagggacg 300
 t 301

<210> 395
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-D6
 <400> 395

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 catgtcatga tggatgatga gaccgaggat gatgatgaag atgctgaagg ggacggagag 180
 ggtgacgagg aagaatatga cgtgaaccat gcttccgccg atgttgatga tgagatggac 240
 gaggatgatg atataggtga tgatggggat gatggtggtg atggagttga ggtgaatgca 300
 gatgaagatg aaggcgcgac ctcatactcg tcagagtaca gtgaataaga gcttctgtct 360

ccggtgacca tttatgcagg tagtgatact ggtggacaat aataagcctt ttgccccctt 420
 ttgggggcat agtgggctag atgtggaacg ggga 454

<210> 396
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-009-Q1-E1-D7
 <400> 396

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 gtaccaattc cactattctt tcatttcaca ttgagtgaag agggatacat cctcaacttt 120
 gggaaaatgt aacttggtat tgtttatctc atttctact catctttgct cgagtcttgt 180
 gatggataga caaagcacac ctcttcggt ctacaacaac aacgacaagt tcgatgccat 240
 gaaatacaac ttggacgcca aaatggatgc tcaattggag gagatcaaag ccctcatcaa 300
 ggccatacag cggctcttct catcttcgag aagacgctca agtgcacata cttccgagct 360
 accatctctg gctagatcac attggcatta acaccaccac cgacaagaac atgaagggtca 420
 acagctcaac agc 433

<210> 397
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-009-Q1-E1-D8
 <400> 397

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 ggttgacgca ttgagaagat tagtcggtag catcggccta cccgccacat gcaccctctt 120
 cgagatatcc ttagatgaag gtggcccgct ctgagcacgg atcgctactcg gtgcccggctg 180
 gctcgcaccc ttgttattct ttcttttcca tcccttcttc ttctgatgta atgggatcga 240
 gttctgctca gagaccaccc tcttgagtgt gttggggctg ataatatctc gcacctcggc 300
 tatctgaggg tcggtgaagg cggcagctgg aagcatctcc tgagaacgta atgccagacg 360
 acgcctgttg caattgggtt tctccgcggt accagctaga tcgcgatcgt cttttgtang 420

gttgggttct tga

433

<210> 398

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-E1

<400> 398

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tatgtaacga agttcgagca tcagatagtt ttgattgtc ttccttatga gtggcggtcg 120

gggacgagcg atgggtctttt cctaccaatc tatgccccta ggagcatgcg tgtggtactt 180

tgtttcaatg actactagat gtttgcaata agtttgtgag ttcttttatga ctaacgttga 240

gtccatggat tatacgcaact ctcagccttc caccattgcg agcctctcta gtgcataact 300

ttccccggtc tcgacaaccg accatagtag cttcctcaca atagccacca tacctaccta 360

ttatggcatt tccatagtag gtctcagata tattgccatg c 401

<210> 399

<211> 455

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-009-Q1-E1-E2

<400> 399

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ggggccatag gtttcactag tggcttctct caagatagca taagtattac ggtgggtgaa 120

caaattactg tcgagcaatt gatagaattg agcatagtta tgagaatata taggtatgat 180

catgtatata ggcatacagt ccgtgacaag tagaccgact cctgcctgca tctactacta 240

ttactccaca cattgaccgc tatccagcat gcatctagag tattaagttc ataagaacgg 300

agtaacgctt taagcaagat gacacgatgt agagggataa actcatgcaa tatgatataa 360

accccatctt tttatcctcg atggcaataa tagaacacgt gtcgtttccc ctattgtcac 420

tgggatcgag caccgcanga ttgaacccaa agcta 455

<210> 400
 <211> 408
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-009-Q1-E1-E3

 <400> 400

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 gaaatgagaa ggagaaaagc atttccaata gcaagggtgaa ggcttctaaa gtaaagaaag 120
 aagaaaccgg ttctgatgat gaatgcaagc caaaatctca gaagagaagt ccagctgcgg 180
 gcaaacccaa gatttccaag attaagaaac caaaagatga atatgataca aaggaggaaa 240
 agaaaataaa gaaggaagtt ggtatcaaga aagatgaaaa gaaggctgct ggggtggagg 300
 gggctattgt ggtgaagaag gagagaaagt tgtatgaatt gccagggcag aaacatgatc 360
 ctctctctga aagggatcca ttgaggatat tttatgaatc gctctatg 408

<210> 401
 <211> 433
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-009-Q1-E1-E5

 <400> 401

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 tattcattta agtaagagaa taatgcttat tctgtttaca taattaacac cttctatggt 120
 catgcacca atatgaatgg tttattgaat ctcggttgta gtgatacaca tgttcataac 180
 gttgatgcca aaagatgaag agttgataat gatagtacca ctttcttggtg gcaactgccg 240
 ttaggtcata ttggtgtaaa gcgcatgagg aatctccatg ccgatggact tttgaagtcg 300
 cttgattttg aatcgcttga cacatgcgaa ccatgcctca ttggcaagat gactaaaacc 360
 ccattctttg gaacaatgga acgggcaagt gacttggttg aaatcataca tgctggtgtg 420
 tgcttgctct gtg 433

<210> 402
 <211> 439
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-E6

<400> 402

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atcgagatga tccagatatt agctattaga gcacaagtgg aggagattga aattgatgag  120
gacagtcttg catttctagg ggaggttggg cagcagacat ctttgagaca tgctattcag  180
ctgctgtcgc ctgctagcgt agttgccaag gctaattggga gggagaagat ctgcaaggct  240
gatctcgaag aagtccgtgg tctgtatttg gacgcaaagt cctctgctcg tttgcttcag  300
gaccagcaag gaagctacat cacctaaact aactcctgca caagaattcc cagctgtcgg  360
ctcaagtgat tggactgtct tcccctagca gatttggtaa gcagccgcac agacttcac  420
aagtgtacaa ttggggcat                                     439

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<210> 403

<211> 440

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-E8

<400> 403

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tgctaaccga cgtaaaacac aatagccgca gagcaaagga taagacgatc gacggaggag  120
aggaggtgga gaaacaacat ccggacatga agccaggacc gacacgaggg gcggcgccgg  180
atgaaacaag acagacggtg atggcgcgag gggggagggg aggaagacag accgggggaa  240
caaaagaaaa gatacattat aaaacctgaa atgtttaagg actaaagtgt aaaaggaaaa  300
ataataaaca gagaaaattt ggtttaggca aataaacaga gaaagttttt tttttgagac  360
aaataaacag agaaagtgaa aacttttttt ttgaagctaa gaaactgaga actggaaaca  420
ggaaaacacg cggccgctct                                     440

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<210> 404

<211> 294

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-F2

<400> 404

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gtagcattca cgtatgatga ccgttgtgtg gcaaatttga agcatgggggt gtttcgctca 120
atgacatcca tactaatgta cgtctgcgac caacgataga cctcttctat caagtccatc 180
acctaagggc atgcgtagta gtacttttct tccatggcta agaaaatttt gcaattacta 240
aacgaattct ttatgacaaa tatgactcta tcggtaactg gcatatttac catt 294

<210> 405

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-F7

<400> 405

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gccatgcata gacgcggagg agcttgtgta ggtgtgaatg gggaccggag ggggtggcggg 120
cggggtgagg gtttttatga tgtggggatg gtgagagttt tcttttttct tttttgaatt 180
gggtggtgag ggttttctgt cccacaaaga atttcagagg caacaatttg ctagagccaa 240
ccatgtgtgg ttgacgtaac aggcaaatg aaagtcattg cacatagttc caattttggg 300
aatcgtgtgt gattgacgta ctaccttcgt cctggtttat tggteccctt tgtaatttgt 360
agcagatttt gaccaaatat ttaactaaga gatgtttatg catgt 405

<210> 406

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-G2

<400> 406

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tcgagggtgag aaaggacaat gcacgggtacc atagaggcta gcaaattgcg gaaagaggta 120
agaatgcgta taatccatgg actcacatta gtcataaaga actcatatac ttattgcaaa 180

agttttattag ccctcgaagc aaagtactac tacgcatgcc cctaggggga tagattggta 240
 ggaaaagacc atcactcatc cccgaccgcc actcataagg aagacaatca ataataaatc 300
 atgctccaac ttcttagcat aacgagagac tataacttga tgcttcggga atcacaaaacc 360
 ttaacacaaa tattcttact aaccacaatc attcactagt acctcccaca tattatcatc 420
 tctatatcgc g 431

<210> 407
 <211> 307
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-G3

<400> 407

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 gaagagagat aagttagtgt cagggtgagt tctttgcttg tagtaggaag taaggctctgt 120
 tcttgacagag cttgaagctg gttgaataga tgaaagctga gtccttagtg ttagcaagga 180
 atgttttggc aaggctttgt gtcagagtca atttgtttcc atgtaacact ttgttggttca 240
 atcggttacc ttaagtggga atggattatt gtgtcaagaa agtgggtgaag agaattattgg 300
 gtaccca 307

<210> 408
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-G4

<400> 408

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 agaaggccac caaggcttag aaacacgcat atgttgctgt aggctgttta atgcttcgta 120
 actgtggctg ttgttctgct aatgggtgctg atgtaatctt tgttgctaag agaaatgtca 180
 gaaatctctc tgattaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagaaaaaa aaaaaaaaaa aaaaaaaaaa 300
 aaaagggggc gtcaaaagg ttcaaacctt acttaccctt gaatgcaatt tcaaaccctt 360

tcaaaagggt caccaaaatt caatt

385

<210> 409
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-G5

<400> 409

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gcccattggt ccatcacagc ccaactctgg cctcttcggg ggcattcaaca tcgggtcacg 120
tcggcaccat agcgcgagct gccgccgcgc ccgtccgacc gcatagcgaa aggtacccaa 180
acggtgcatt tcgtcatgaa cttgatcagg taggtatctg ggattgctcc gtatgataat 240
cctatcactg atctttctca cgttggcaat gacaatcctg ccctgacagt ggccaagcga 300
ttattgggta accacaagat ggcgatcaag aagagatagg agatgatcag tgtcct 356

<210> 410
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-009-Q1-E1-G7

<400> 410

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caagggtggc tggcccatgt actgtatcac tctcagccca tgcgccagt aggatttagt 180
attttcaatt ttcttttcta ttttcttttc tagcctctgt tttgcgttta gttggggtac 240
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gtacaaaaag tctcagagca tttggagttg tataagcatt ttcaaaaatt gaaattgttg 360
gttaaaatgg ttgctgatcc actgtttaat ttttaagggc actttaacaa cttaaataat 420
gttgggttct tcata 435

<210> 411
<211> 421
<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-009-Q1-E1-H1

<400> 411

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caaactcacg gccttcagcc acgcctcgct tctcttcgag tacaagatga ccagtgatgg   180
cgaagtgtat gacaacttca ccatccacag ggactaccgc gacgtgctcg gctgcgtgca   240
cgacagttgc ttccccacca cactcgctac gtgactgtcg agccgccatg gagccaacca   300
gcggttaata aaggagttg gccctgtatt ttcattagtt ttcattggtg gcgcattgtg   360
tggtctctgt tcttcgcagt ctgttcgct agactgtgga ggttttctgt cactgttgct   420
g                                                                 421

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<210> 412

<211> 439

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-010-Q1-E1-A2

<400> 412

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ggtaggcccc acatggtttg cctccttttt taatttaaca taacgcgtca agtcacaatt   120
tgtttggtca cccgtggtag acaatcctcc ctccaccaag tggacaacca gtacacgtgc   180
gaaattacca cgtgggctgc ctttttcgta cagaaatgag ctccaccgtg tacacgcgcg   240
gggtgtggtg ggaaagaaac ggggtgtacg gtgccgtgcg tgcacctctt ctcttcgtgc   300
acgtcccca tctacgtggg tgtgtgtgag agagatacaa acctagacat aatgcgccgt   360
ccatcccat gccctcgccc agtcgcacca ccagtcacca ccacgcccc ctctctctca   420
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<210> 413

<211> 456

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-010-Q1-E1-A6

<400> 413

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tgtggatgct gtggcacttg agaagcttga aaaacagggt gttgtttgtg aacccaaagc 120
ctctaccatc gcgattattc aggacaagta caggcagaaa ggccatttct caaaatttgg 180
aattccgata gctgactttg ttgaagttga tactttaagt agcatagaga atgctgggga 240
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tgctgttgcc caaaataaag aagagctatc ctccggtgtt tcttactgg gtggatttta 360
gcatggcctg tatgttgagc ggtggacacc ttttgcgaag gagctatctg taattgtggc 420
aaggagcaga gatggttgta cagtctgtta tctgtg 456

<210> 414

<211> 358

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-A9

<400> 414

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ctcatggttt gttctgtgc tcctgaaatc gatggcggtc cgcctctccg acatcctcct 120
ccacggagag ccgccaagc aacgtgatgc attttcttct cccatgaacg cttcaccaag 180
tagcagcaca tggagttggt cgcattaaga ggaggagcaa gattgggatg actcgggcga 240
ctatttcctc cctgatctc taatgtctag ggcccagata cgcggttggt catcccacat 300
cttgatgcca tttgctttcc tgcgaatctt caagtgtcac tgtagattt tgatgggt 358

<210> 415

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-B12

<400> 415

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cctcttacctt cttcgtatct tttgaacgat tatccgtata atagtataat ttcgagagag 120
gaaataaacg gacatatgct tctcaactac tcataacagg tgacataata ttgacagatg 180
acgttacaca gccactttga cgataatddd aaacgggatt ttgtgccaag tgatatctcg 240
tttgagaggt gttgaggata cctatgcaat tataactaatt ttgtttgggt ttgagttgat 300
tttgatgagt aaatgaaata aatactaaaa ttttagtttc gcatttgaat ctttattaat 360
cggatgcgaa actgtaattd taatatttat ttaattaatt catcgatca acataaaccc 420
atacaaaact acactcacgg ggagaaaatt cctccaccaa aa 462

<210> 416
<211> 463
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-010-Q1-E1-B2
<400> 416

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gctttgctga tgaggaatgc cctttgatgg gcactagagt tcgccttatg atatgataga 180
tggtgcgggg tagatactct aggtcttcaa caaagaattc ctttgatgat tcagcgctac 240
gtggcagtggt cttcatcatg ctcatgattt ggctcatggt gagctcagcc ttctgaaaga 300
tgctttccac aacatcgagg tgaagctgac aaccagggtc gtacagttcg cctggagtgg 360
atatgccggt aagctcaatg agatcaaagg ctttggtctc atgatgaaca ttgcctgtga 420
tccactcaag gacccatgtc gttgtatccc tattgtagcc gcg 463

<210> 417
<211> 336
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-010-Q1-E1-B7
<400> 417

tcgcgggtcg acgggttcaa gcaataccgc tgccacacca tcaagaactg cacgcatgcc 60
tgccccaagg gactgaaccc ggcgaagcag atcgacacaa taaagaagct gcagctcgga 120

gcctgagtga ggtctaccac cccgtggaga tgtggaaaat tgtaatcagc ctggcatttg 180
gtttgttttg gctccgtggg gacaaataat ggggtggaaac gctggatatt cctagcttga 240
cgattccgtg tagttcgtga ataattgcta ccagatttta ttcttttcgt gctgtatcta 300
gtttgggtgt tctccgttga tcattctttt aaaaac 336

<210> 418
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-B8

<400> 418

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ttgcctctat caagtgggtat cagatttcca ggttgctcgg tgagatttta cagtttttcg 120
tagtttagat cgagtctgtt cttcatacct atagtccacg aaaaagccaa aataaaatta 180
gggttagttc atcccatccg aaccaatctg agccttgcat aatcttttct gtatttgctt 240
tgtcgaattt gcggttgcat cgtcgtgtcc agttgctggt cttagcgtct agtcttttag 300
agtttcgagt tctgttcaca ggttgtcacg tcgccgctac catataccac caccacatat 360
tcaccgcaa tccgaatcca tatacgccac cacatatccg ccgccatcac gccaatccga 420
gttcacctgc aacatatatc cg 442

<210> 419
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-C2

<400> 419

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ggccccggca tagaggacga cggctctgat gaagcatgag tacatgatgc aatgctattg 120
gtccgctcggc gtaggtgata gacgtcgatc tctatcagtg gacgacgcga gtcttggtag 180
gtgctcccgat atgctggaag acagtgggtc tggatgtagt ataagactgt tgctatcggg 240
gatgtgtcta gtgaaggctg gtgtcaccat cgagtgttct aacactgact gtgtacgaat 300

gggaaaatgg acggagatgt ctggggaacc atgttttttg gacgccactg tcagagatat 360
 gggaaagtta cgaacttata cgccgtctat aatttgggca tcacgtcggg tgtggctcgc 420
 atcatg 426

<210> 420
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-C6
 <400> 420

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 gcatgagctg cagcagcacg agctcttgct gatccgccgc cccaggccgt acggctgcga 120
 cgggtgcgaa gagatgggca cctcctgggc ctacaactgc gcggagtgtg acttcgatct 180
 gcacaccaag tgcgcgctgg gtgaggagaa gaaggagag gaggtgaagg ggcaggagga 240
 tgctgctgcc ccagctgggt acgtgtgcga gggagacgtc tgcaggaagg cctaggtagc 300
 gttgtgttgt gtgtgttctt ttccagctga agcgtgtctg aatcatgtgc tgtgtggtgt 360
 gatgataaat aaatcttgca tccgatgggt tggttgga agtagtattt gtcgtggtga 420
 cattcatgtg c 431

<210> 421
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-C7
 <400> 421

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 ctgacgagct gacaggtgtt cccttcagcc aatcataatt ttacacgtgg aaattcccca 120
 ttggtcgggg ctgttaacgg gttatcggat ccaaaatcct acacgatagc ttaacggcat 180
 tcctttacgg tggatgcctc gtgttggtca cccttgacga aagcacttct atgacgcgcg 240
 atttatcatc atggaagtgg acacttccgt gatgataatt ttggtaatgc catggatcac 300
 ttctacgaca gcacaggtat gactatcttg attctatcat aaatttgta tggatgtaca 360

tgcatgataa aaaacgcgac ctactccgac aaacacgtat catcacggaa gtgtactttt 420
 ttg 423

<210> 422
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-010-Q1-E1-C8
 <400> 422

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 gtcgcattg ccatacgagt cagagttttc tggttctgcc taaaaccagg cagattctag 180
 gcacgggagc tttccaggca gattctaggc agattccagg catggaagat ttacgatgtc 240
 tggcacatca caaacagttc atgattataa accgtatacg ataggtagac aatcacacac 300
 atttagtttt cccgcaccgt atgtgatagt gtctgacatc acacacgctt tgcgaacggc 360
 aactgtgtgc atgcttgac acgtttcttc tctgtgaacc gtctcggatt atgggtgtat 420
 acgcanaaat tttgtgtt 438

<210> 423
 <211> 352
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-C9
 <400> 423

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 ttggacgaat atccgtataa taataggatt tcgagagagg aaatacacgg gcatatgctt 120
 cgcaactact cataacaggt gatatactac tgacagatca cgtaacatag ccactttgtc 180
 gatgatttta atccggattt tgtgccaaagt gatattctgt ttgatagggtg ttgaggatat 240
 ctatgcaatt ataccaattt tgtttggatg tgaattgagt ttcattgactc aatgacatac 300
 atactagaat tttagtttcg cactttgaac cttattaacc cgggtgcgaa ac 352

<210> 424
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-D1

<400> 424

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gcccaattcc cgctgcccccc ggctctccaa tcgcagttct ggctgtgggt ggtgacgtgg 120
cacctggggtc tgttcacgc gctcaccttc ggccagatcg ggttcaaggg caggaccgag 180
gactacttcc agaagtagcg aattaactag ctttggttcg tgcattgtgc tcgtccttgg 240
gctgctcaag ggctgcttct gcgcattcgt gttcaatgta aaatctgcca tgccttttgg 300
ttttgtgcat gcgtgtgggt tcgcaagccg tgtgattgct gtttgtaaat tacctcttcc 360
atggtaagca caaaagagtt caacaaaagg acagcggcag ctaggaaaaa aaaagcggcc 420
gctctagagg atccaag 437
  
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<210> 425
 <211> 364
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-D9

<400> 425

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tgcttggttg tcacaagcca aaataaatca agatatacat ttcgattggg tgcagtatac 120
cggagaaata ccagagaatg ctataatagg cggatcaact gctgatgggt atccaacgta 180
tgtagcccggt tcgttctcca gtgcagatga agatgatgaa aattactctg gaagtgacta 240
caatgggttat gtagctgggt gtgtgttacc tggaaaattg tcgatcgacc tttgtactcc 300
gcagagtata tacacgctca caaagaacat tgagatactg actgtgggtca atgggacaaa 360
aatc 364
  
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<210> 426
 <211> 450
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-010-Q1-E1-E6

<400> 426

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taagactcaa aaacattttg ttctagactc aacaacgtca gcgattcgat caagtagggg 120

gtcctaagt cagggatagc tgtgatacca acttgtaacg cccacaatgc ggctatatct 180

cccatgtgtc ggggcacagc ttagaggcat agccacatgg tagttttgtc gcaagagggg 240

taatattcac acaatcccat gtcctgaata agaaagggat aaagagttgg cttacaatcg 300

ccacttcaca caaatacaag ttaaacaatcc atcatccaga atacaatcaa gttccgacta 360

cggatccaaa gtaaaagaag acaaccccaa atgctagatt cctgatcgtc ccaactgggc 420

tccactactg atcatcgga aaagaaacat 450

<210> 427

<211> 445

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-010-Q1-E1-E8

<400> 427

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tacatcaata tttgttttac gttctatacc atttttctaa aatgtcgcgt acattatttt 120

ggaacacatg cacatttctt aatgtcatga tttttttgga ctgctaccaa catcatttat 180

aaattacacc tttttttaca ctgttaaaaa ttcatgacgt tttttaaaga agtaagtaaa 240

ttattttttg taatatattt atttataata ttttcaaaag taaaaaaata aagaggccaa 300

aagttactgg tgcattgtga cctgcatgat catgggcgcc catttanggc atccttgagg 360

tgagacgtgc tattgttact gttttttgag ataccttacc aggcttgatg ccgggagcac 420

ctatgtgccg cttactgcag aaatc 445

<210> 428

<211> 439

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-010-Q1-E1-F5

<400> 428

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aggaaaagagc attaatgtctg cctcatcgg tggttctagc ctggcattca catctgccat 120
cctggacggtt ggtggtaata ctaccagagt ggacaatgga aaagcgtacc atgcatacac 180
aacggaaaaag aagcccgagc ctgcgcattg accaaggttg tctacttgta gcacaaatca 240
tgcaaaccag ctcggtgaat ttttgagctg atgcgtgctg ttatgtctgt tttgctgatg 300
cacctagttc ctttgcaaag ctgtagtaac ttgttttgct cgaggggcaat acaacagacc 360
tggaataaat atcttgcttt attttgcttc atcgttggtt atgataataa tcacaatgtg 420
acacaatatt gtttaccba 439

<210> 429

<211> 186

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-F7

<400> 429

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aaatgcgcct ttgtgaattg aaaactgtaa gcgtagttta aactgcggcc gctcgaaagg 120
atccagagct tacgtacacg tgcatacgac gtcagacctc ttctatactg tcaggtaact 180
tgatgt 186

<210> 430

<211> 443

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-010-Q1-E1-F8

<400> 430

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aaaaagaggc tattgatccg atcaaatggc gttaccatgg tcggacacga ccaagccccc 120

gataggcgta gctatggttc aagtcagcca ggtcccaaaa tgaaacaatg gcattatgcc 180
 gatcaaaagg cgtgacaatg gttcgggttc gaccaagccc ccaagtgatt ctgtggcctt 240
 aggccgatca agaggcgtga ctatggttca gacgtgacca caagtcccca agtgatgcat 300
 tggcattacg ccgatcaaga ggtgtagcaa tggttcgggt tcgaccanag cccccaagtg 360
 atgctgtggc actaagccga tcaagaagtg tgactatggt tcagacgtga ccacaagtcc 420
 ccaagtgatg ttgtggcttt ccg 443

<210> 431
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-G5

<400> 431
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 gtccagacga ggtgacggag caggtcggta aggagacgtt gcaacttcca tgtcagtcga 120
 ggtgttgaag tagttcggcg tgatggacat cggctcgaag aagcaatggt gcggccatgc 180
 cgatgcaggt cacaactcgt gacgtgggtca atgccggctt gatgaagtga ccgtgcggcg 240
 atgccgatgt gcccgtccg tgtaatccgt ggggcggcga ggttggtgat gatttatcct 300
 tcgcatgct aaaatcttgt ttggcttgcc gggatgatga tccgaagaag ttgagctcgg 360
 ctcaacaaag cgacgatgtg tctagcgcag gtcggcagcc gtggagcaac gttgtcgagc 420
 tggtttgaca ccggcgcg 438

<210> 432
 <211> 348
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-H11

<400> 432
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 taaaatttg gaggaataaa agatccgccca caagattatg gatttactat aagagcaggg 120
 aagacagact atcaaattca agtaaaagt accgatactt ctcaagtttc gacagaggaa 180

agcagaaaca ttacaactta ctttcaaaca aataccgttg aagtgaatgg aataaacggc 240
 tgggggtatat ctaaattggtt ataccaaaat attgaataac caacactcac attagaagca 300
 aaacataggc aattttacta ttaaggaatt gaataaaaaa attacttg 348

<210> 433
 <211> 327
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-H4
 <400> 433

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 aagaagcaga accctcacat tggccacttc acaaaggatg tggcaaggcg gtcctatgac 120
 actgatttga tagttgatgg ctaccaagac tacattaccg aagctgtgtg gttcaaggaa 180
 cagtatgact tcaagctggg taatctgatg gagcactacg gaataaatag cgaggctgag 240
 ataataagtg gatgcattct taagatggca aataatttta ccaagaagaa cgacgccgat 300
 gctatcaagc tggcggtgaa atctttg 327

<210> 434
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-010-Q1-E1-H5
 <400> 434

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 gccgcattaa caagcctcac gacccgcttt tacgcaggag aggatagttg gttggcaaga 180
 agcagcacca gcgacccgag cacatccgaa ctgagagatg gaaatgggaa accgcgccgt 240
 aacaaagaac aacgccggat caaggataat agcttgatga gcacggcagt caatgccgga 300
 ttcaaaagct ctcggaacaaa tcagaaaaaa ctgccacca aagatgacag ggacgagctg 360
 tctaacctca aaaaaatcct ggacaagata tgtaaaatcc acagtacccc cgaggacctg 420
 caaaccatac ccacagagat t 441

<210> 435
 <211> 356
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-H6

<400> 435

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 tggagacgta caagatctac atcttcaagg tgctcaagca ggtgcacccg gacatcggca 180
 tctcctccaa ggccatgtcc atcatgaact cttcatcaa cgacatcttc gagaagctcg 240
 ccgggggagtc cgccaagctc gcccgctaca acaagaagcc caccatcacg tcccgggaga 300
 ttcagacctc cgtccgcctc gtctccccg gcgagctcgc caagcacgcc gtctct 356

<210> 436
 <211> 434
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-010-Q1-E1-H7

<400> 436

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 atcaccaacg acggttaaat cctaagatga aagaagtggg aagaaaagaa atactaaagc 180
 ttccggaggt aggtataatt tatccggtg atgatagtc gtaggtaagt cctgtccatt 240
 gtgtccctaa gaaggaggt attactgttg ttcctaatga taaagatgaa ttgatccac 300
 aaagaattat taccggttat agaatggtaa ttgatttccg caaattaaat aaagctacta 360
 aaaaggaaca ttacccttta ccttttattg atcaaatgct agaaagatta tccaaacata 420
 cacatttttg cttt 434

<210> 437
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-A2

<400> 437

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aaagctgcaa ggtccaaaga gcttgctgcg aagccgtctc gcacagagaa tgagaacaag 180
aagaagaaga agaagaagaa gaagaaaacg ctgcaccagc aggagggcat tatggatgga 240
tgaactatatt cctctcttgt aaaaaaaatt attccctctc ggtgtatatt gatatagatg 300
gactatttcg atgggtgtgca tgtctttgga acagagtagt agcgtgggtc ctcttgacta 360
taagaaacta cttatccaca tatatagctt tctctgctac tccttccagt gatcggtatg 420
cagtgc 426

<210> 438

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-A3

<400> 438

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tcgagtgaga aacaaacctt caatgaagaa ttgatcttaa tggatgaagaa ctttaacaag 180
ttctacaaga gtagaagcaa agagagaagc tccaagtcaa aggctacaa tgacagaaga 240
tcttctactc cacagtgaaa ctgctacaat tgtggaaggc ccggacacta atccaatgac 300
tgtaccgacc cctagaagat aatagaagaa tctcccatga gatgaattat catagatgaa 360
tcaccatcta tagaaagaaa gagtacag 388

<210> 439

<211> 340

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-A4

<400> 439

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gccagttcga cgcgctgagc acgactcagt ccttggtacc cttgggatct acggctgggc 180
acatcaacac tctcaacggg gggcatttca gtggcagact ttctacacat cgggtgtgta 240
atagccagac ggtatcatgc tactcgctt gaagaagggt gccctttcgc caactgtctg 300
atcaccgacg aggggaggac cgatagcagc atcacaatga 340

<210> 440
<211> 404
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-011-Q1-E1-A5

<400> 440
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gcctctatca agtgggtatca gatttcagg ttgctcgggt agattttaca gtttttcgta 120
gttttagatcg agtctgttct tcagacctag agtccatgaa tgaaagccac agaataagat 180
acggttagtt catcatatcc gaatcaatct gagcctttgc ataatctttt taggggtttt 240
gctttgttga atttgcggtt gcatcgctgt gtcaagttgc tggctctaga gtctagtctt 300
ttagagtttc gagttctggt cagaagttgt cagccgccg ccgcaccagc atcatcgctt 360
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<210> 441
<211> 427
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-011-Q1-E1-A6

<400> 441
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tcattatcaa caaaggggat ggtggggttt aactgcagca agccagcttt gactcgggtg 180
ctatcctaaa ctacgactgc aatgtaactc ttttgagggt gcgcacacga gtccacatat 240

tcaccatatac aatacaccac tatggaaccg ctcccgctctc cctacgagaa cgccatccat 300
 agcactcatg cttatcttgc gtattttaga gstatccactt tcacttgtct atgaactgat 360
 ataagcaacc cagaagtctt ttaccgcgga cactgctatt cgaatagatg atgttaaccc 420
 tgcaagg 427

<210> 442
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-A8
 <400> 442

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 cccctcctgc ctctgcaggg gctgcttcaa gaacaaggac gacgaggaga tcaccctgtg 180
 cgacgggtgc gacgaggcct accacgtgta ctgcatgacg cccaagcgca cctgcgtccc 240
 caagggccac tggtagtgcg cgctgtgcag cgtgcggcgg gcaagggagg ggatgcagag 300
 gtacgagaag tcgatcctga agaaacaaca acatataagc gccaaagcgtg cgagccagtc 360
 ggacgacgct tagcctagtt gatgatgcta ttgcttgccc aagaagggag taataagcag 420
 agcaacgttt 430

<210> 443
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-A9
 <400> 443

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 ataactatga gttagtgtg ctctcacat gagttgtaac gttgagcaat tagagcttag 120
 tgctagaata tagaaggtct agagttctct ctttattatc catgatcatg tgtttgtaac 180
 tgctactgta actcaacctg ggtgttctgt atataaagag aagacagccg gtgaggttca 240
 tcacggctta acacagcaat acttctgttt acatgggtatc agacgccatc tgaccaatgt 300

caacctcttc ctctctctc atggcttccg tgccggcggc taccaccgtc gtcaccgtgc 360
gtctctctcg cgacaacccat ctcatgtgga aggcacagtt cctcgcatc ctgcgcacct 420
acaatctcct tggcatcgca tctg 444

<210> 444
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-B12

<400> 444

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gtagaatata atctaccatg aacataaata tcgtaaaggc tacgttgatt tgatttaact 120
acatgcgtga acatgtgcca agtctagcca ctcaattcat ttaaaggagg ataccatccc 180
atcataccac atcataatca ttctaatagc atgttggcac gcaaggtaaa ccattataac 240
tcatagctaa tcaagcatgg cacaagcaac tataatctct aaatgtcatt acaaatatgc 300
ttacttcata atagctgact caggaacgat ggatcatcat atttacaaaa acaagagagg 360
tcgagttcat accagctttt ctcatcccaa taagtccatc atatatcatc attattgcct 420
ttca 424

<210> 445
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-B2

<400> 445

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agcagcagaa tgcccaagggt gcatatagtt ctacagaaga ggtgaaggag gaagtaaagt 120
gcatcaaagc cattatagag aggctgatac agagggaagg ccatcttgta gtcatagacg 180
aaggaacagc ggcagcagaa ggtgctgcag caagggcatc ggagcacaga atcctggctg 240
ttaaccgaa ctacgtcatt gattgattaa ccagctgagg acacagctaa ctagatccat 300
catatgtggt tgaccaatag agcagacatt caaacggaag acatcctgtt gtcatatgct 360

ctacaaatga tatgttgtag ctgccatccc ctcccaagg agagcatag

409

<210> 446
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-B5

<400> 446

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caatgggata tagatttgca aacatcatta cccatcctc aacagacaca tctcttcaaa 120
attttaacgg gcatgtgaat ctcaactg atccaaccct tatcatttac tggacgacct 180
aaaccaagca gtgcacatca tcatcagtcg tctctcatga cgcaactctt ggtggccatt 240
taactgcaga tggtactcat catatgataa tcgagctttt tgccaacatg tcaactctccg 300
taaacggacc tcatattaac agtcacacga acacaggctg ttcaaagggc catggactt 359

<210> 447
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-B6

<400> 447

attccccgggt cgacggggacg gtagacgggt gcatcggcgg ataagtcccg ttgcagtagt 60
agagaaggtc atgtgagcgg ccccgacaaa gaggacgacg gcaccgatga agcaagagga 120
cgcgatgcaa ggctattagt ctgtcgccgt ggatgagaaa cgtccatctc tagcagtgga 180
cgaagcggtc ttggtaggcg ctccggcatg gtggaggatg gtggcgttgg atgtggtgga 240
ggacggcggc gatggatggg gtggaggacg acgatgatgg atgggggtggc cgacggaggc 300
tggtgtgggg atggtgttct tgcgcggaca gtgtatgaat gggaaaatgg agggagaggt 360
ataggaaca acgtttttgg gatgcgcctc tctgaaatat gggaaagtta cgaact 416

<210> 448
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-B7

<400> 448

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ctagtgtcac ctgttgatgt ggtggttccc cctggcaaca ctggtctgga tccctcccag 120
acgtccttct tccagggtgt taacattccc accaagatta acaagggtac tgtggaaatt 180
actatcccag tggagctgat caagaagggt gacaagggtg gtcctctga gtctgccctg 240
cttgccaagc ttggtatccg ccccttctca tatggactgg tcatctgcaa tgtctatgac 300
agtgggtctg tcttcagccc tgaggttctt gaccttactg aggaagacct gatggacaag 360
tttgcttctg gtgtttccat ggttgccctca ctgtccctgg cgatctcata cccaacatg 420
gctg 424

<210> 449

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-B8

<400> 449

attccccgggt cgacgggtca catagatgca taattattca actactcatt gatcttcact 60
tatatctttc ggagtagttt gtcatttgct ctagtgttc acttatatct tttagagcac 120
ggcgggtggtt ttattttgaa gaaatagatg aactctcatg cttcacttat atcattttta 180
gagtccttta gaacagcatg gtaatttgct ttggctataa aattagtcct aatatgatag 240
gcatccaaga tggaaataat aaaaactttc atataagtgc attgaatact aagagaagtt 300
tgatacttga tgattgttga gatatggaga tagtgatatt aaagttgtgc tagttgagta 360
gttgatgaatt tgagaaatac ttgtgttgaa gtttgcaagt cccgtaacat gcacgtatgg 420
taaacgttgg 430

<210> 450

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-C12

<400> 450

cgctgccagt gccggtccag aattaccggg tcgacggggg ctgcaggcgc gtcttcgagg 60

tcgccgtcga gctgtccagg aacatgggct gcagcttcat ctcccccgag cacctcgcca 120

tcgcgctctt cacgctcgac gatccacca ccaacaatct cctcagaagc ttgggagcgg 180

atccgagtca gctagcgtca gttgcagtca cccgactcca tgaagagctt gcaaaagatg 240

gcagagatct cgcaggagca tcttctctca aagtgcccg gaaagcacc gctggagctg 300

gagctggaag atctgccttc agcaaatcct taagcaaaaa gaaagataaa ggcgcgctag 360

atcagttttg tctagatttg accacacaag ccagtggagg gtttattgac cccattattg 420

gccgcg 426

<210> 451

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-C2

<400> 451

ggtcctaaat taccgggtcg acgggaaaat gttaatagag catttgagaa atgctaaaaa 60

tgtgtataga aaaaatgttg acctgtact aaaaatattt aattttgtat tgaaaaaata 120

ttaaacaatgt attagataaa tatcattgcc atataaaata tatatatata gaaaaccaa 180

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaag gacaacaaaa aaaaaaaaaa aaaaaaaaaa acggggcccc caaaagggtc 300

aaaccttact tacccttgaa tggaagttaa aaccctcca aaagtttcac caaatttcac 360

ttaacggggc gtctttttaa aactccgtaa cggg 394

<210> 452

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-C4

<400> 452

gggtcgacgg ggggcgtaaa aaaagttgta ctattggcgg aagaaatctt cagggcggtg 60

ctgggatgga gagccgttca caggactgcg gcgacgtgat cttctgaagt ttcttcacac 120
 tgggtgaaagc ctttgggaga tttattctgt catcgatcta tacatgtagc tcctgtctta 180
 tttctccagt ctgaactggt ggggggttatg ctactagtta tcgtttgttc tgaacttgat 240
 gttctggttg tttttgcttg agtcgtcctg gagagcccg cttgtgagat ttctcagggc 300
 tgtgctgggt ggttgcgttt tgcgtttgtg aaacctagtc agtttcttag attgggtaaa 360
 aatctgcact tcaaaggagg gaggctgtgg gatttgcctt ttttc 405

<210> 453
 <211> 199
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-C7

<400> 453

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 gatgatgtat aagccctccg tgattgatgc cccctccggc tgagctccgg atcacgccac 120
 acgatgggat ctctgagta cacaacgttg cggcggtgaa agtacgtttt tggcctcgta 180
 tctgatcggt tgggggtac 199

<210> 454
 <211> 409
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-D10

<400> 454

attcacgggt cgacggctga tgaagaccac actacacatg aacaacttga ggtgtatatg 60
 cagaccaca gtctcgtag ggatgattcc ttgtagcagc ttcagtgtgc tgcataaaa 120
 gccatcacag cacatgtctg ccatatagtg cttcatgacc cttgggtag taatgcagac 180
 cagcgtcttc gtgccaaatg actgagatct ttacggaaaa ctttctatgg tgttaaactc 240
 accattggcg atggggaagg gtctcacatg aagaatatag ataacatcga tgacactgcc 300
 ggtagctccc ctgattcgtc atcaaacgg gagtcatcat tcaactccat tccaaaccct 360
 cctcttacct agagtctata tttggacgct cccactttg gcggcacct 409

<210> 455
 <211> 266
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-D2

<400> 455

gggtcgacgg gaacgagcaa atctgagcat gggtgtcggg gtcaacacca gttgatctcg 60
 ggtagggggg cgctaactat gcgtctatga cggatggtaa catgaggcaa gggacatgaa 120
 cttttaccca tattcggggc ctctcgatgg agggtaaatt caatacaaaa tatatcctaa 180
 gttcagcggc cgctctagaa gatgcaagct taagtacccc tgtatacata atcatatctc 240
 ttccacattg acacctaaat tcaatt 266

<210> 456
 <211> 72
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-D6

<400> 456

cgcgatttac attactacac cctaaagtga gtcgtattat agctcttctc ggtgatgaag 60
 caggtgcagt cc 72

<210> 457
 <211> 465
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-D7

<400> 457

gtacagggtcc agaattcccg ggtcgacggg ccatttatct acaacaacat agacatgcaa 60
 aatactatta ggtactaagt tcatgataaa gtaaagttca attaatacata ttacttaaga 120
 actcccactt agatagacat ctctctagtc atctaaatga taatgtgatc catatcaact 180
 aaaccatgtc cgatcatcac gtgatatgga gtagttttca atgggtgaaca tcactatggt 240
 gatcatatct actatatgat tcacgctcgg cctttcggtc tcagtgttct gaggccatat 300

ctgcacatgc taggctcgtc aagtttaacc tgagtattct gcttgtgcaa aactggcttg 360
 caccggttgt atgtgaacgt agagcttatac acacccgatc atcacgtgtt gtctcggcac 420
 gaagaactgt agcaacggtg cataactcagg gagaacactt atacc 465

<210> 458
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-D8
 <400> 458

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 taatagataa ttttctttca catgcctgct ttgcataaag aatgccttat ccgccgctat 120
 tttctttatc gcctcgatct cctggagggc cttctgggct tcggccttag cgtttttggt 180
 actcacaaga gccaaaggcga gctcggacgc tcgagtcttc gagtcacgct ccaaactctc 240
 gtgtttttcc atcagagcct gcagctcttg ccgcacctcc gccatacgtg cctccggcac 300
 gtctcgacag gtgcgctcca atgccccact gttctcggac ttggatacag cctccttcag 360
 ggccgccacc ttgggacgag gccctgcaa catttacgtt g 401

<210> 459
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-E1
 <400> 459

ggtcctaaat taacgggtcg acgggttgac caaagtcaaa ctgcctagag tttgaccaag 60
 tttatagaaa aatataaaca ttaccataa caaatatgta tgatgtgaaa gtacattcaa 120
 taatgaatct aatgggtcttt atttggttatt gtatatgtta atattttttg ttataaactt 180
 tctgagagtt tacaaaactt gactttgacc aatgctaata tgccaactta aataaaaatt 240
 gagggagtag acatttggtt tcttagtttg tagtgaatta atcatttggt gtaattgtga 300
 aataaatata ttaggctact gactttgaat gtaatgggct atacaattca atagttacaa 360
 tcattgttga attccaagat gtataagagg tcttttagtac ttcacaatat gctcaaactc 420

aaataatcct agtcaaatag

440

<210> 460
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-E10

<400> 460

gggtcgacgg gaacgctcag tgaaaccatc ctcttcaagt ttagcttcag tacatatcat 60
tgagagccct ttccatgtac gacagcaggt ttcattgtga acgaaggcat tcttggtggc 120
aagggtttcga agacgattga catccaccaa gaggtctctc atctgacgtt ttagccagtc 180
gtgatgccta tcttgcttct ggtgaagggc cacaagaagc tctcgatcag tgaggacacg 240
agcacgcttc ttgggtcttg gagcatttgt gctgtctgtg gcttcagtag atgctgggtgc 300
acgtgtagtg ccagccaacg gatataccct ggatatggct tcaacacctt caacattctg 360
cgtgaagctc tgggtgttctg cattctgaag a 391

<210> 461
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-E2

<400> 461

gggtcgacgg gttttgggca tgatgttgag acatatcgtg atgagagagg aagggttaga 60
gtaagtaggg tcagaggaat gggaattcgt atgactcgtg atattcaaag gaatttggat 120
tttatcaaag agcatgagca gtcaaaaagc atgggacagg ccaacattgg caaaggatca 180
actagcaatg aagaacctcc agattttccg gaacatcttt ttgaaaatga tgggctgcaa 240
agctctgttg atctcagtga agattttgct gaaactatcg gtgacaacca tcacacgtcg 300
tcaattgtag gaggatctga tgatatttct gagggttcct gccatggaag caaagagaca 360
atagagatat cttttgtgga tgatcaaatt ggagtgaagg acaatgatga caagctgttt 420
ttgca 425

<210> 462

<211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-E4

<400> 462

cgggtccagaa ttcacggggtc gacggggacat gttacgaacg aatcctttga tgatcccatt 60
 catcctctca aacggcatca tgttgtgcag gaatgacggc cccaggtcta ttatgtcatc 120
 cacaatatgg acacacagat gcaccatcac gtcaaagaac gcggggcggga agtacatctc 180
 aagctcattc agtatcacia cgatctcttc ctgtagcctt cggagctgct tcacactgat 240
 cgactttcga gagatgacgt cgaaaaagtt gcagagacca ataagcgtgt cacagacgtg 300
 cttgtccatt atccctctaa gggcaacagg taatatctgc gtcacatca catgacagtc 360
 atgagaattc atcccgtga accttttctt gtccgtgtct agatatctac ttatcttgcc 420
 acagtaatcg ggact 435

<210> 463
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-E5

<400> 463

tacagggtcca gaattcccgg gtcgacctga aaacaaataa taaacttcaa cataacaaac 60
 tttggggggcc acattcattt gcaggaattt tgcaggcaag gaaaatggga aaaattccta 120
 caaaacagag ggccaatatg tcacttactc ggcacatgat gagaaatttc tgtgcacttc 180
 aaactactcc ctccgtctca aaatataaga acatttttga cactttgcaa gtgtaaaaaa 240
 cgttcttata ttttgagacg gagggagtag aatacaata gtttgggttt atctttccat 300
 gctttgttgc caacttcatt aagaaaaagt actcccaat taggcatggg taactaacgt 360
 ttcattttga tttgtacgg tattttctcc tgtagttgaa ttcttttct tctctcgata 420
 catactccat atgcaagatc gggagaaaaac tgcaccgc 458

<210> 464
 <211> 421
 <212> DNA

<223> Clone ID: LIB103-011-Q1-E1-E9

<400> 466

gggtcgacgg cgaaaagaca ctacaacatc aaggagggag cagaggccgc tacgaagctg 60
tcgtgtagaa gctgagaaga tgggttcaac atcctgccct tctactaaat caggacacaa 120
agctggcaac tcgaatgaag ccggcataga agctcctatg cccaacaagt cctacatagt 180
gcctaaatct ggacgctcag ctcgagcttt tgggctcggc tcgcgctcgt tgcaactcgg 240
cccgagctag gctcggccccg tcaagtaaaa aggccgagcc gagctgtact tttaggcttg 300
tttcgacctc ggaccgagcc aggtcggct ggcccaacta gcgagctaaa agctcgcagc 360
ccagcgaagg cccaatgaac accacacacc acaatttagc ccatctagcc cagcaaatg 420
actacaga 428

<210> 467

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-F11

<400> 467

attcacgggt cgacgggatg acgttgcaag attctcggaa aatgaattac gatagcaagc 60
tccaaaacat gagctgggtc tgctacaaca tgtgaacatg ttgtccaaga caagcatgac 120
cacaaagtag tcttataata aaacactact gagttcagga aagggaaacca tcatcgagga 180
tttcgaagtc cttgcataag gcatgctctt aagaaggaaac ttttcctcct tgaacaattc 240
aatcagtggc ttggtgtgct cgggacacat atggaatgaa ggttgcaagt ctccagacca 300
cagaatactt cgcacgtatg catgactgac ttgggatgat tccagaggaa gcaaaaactaa 360
ctttcccaa ttcacggcag caactttcac caaatgcacg tgtataagag gaagtcactc 420
ctttcatcaa acacag 436

<210> 468

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-F3

<400> 468

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aagcaccatg gctgaaggag ttgtaaggag gaattacacc acatgggatg atgagatgga 120
tggtgcactg cttgagggtgc ttgttgatca tcacaacaat ggcgaccatt cacaaaatgg 180
atggaaacca catgtgtatt gtgcagccat aaggaatgtg aaggagaagt gcaacaagaa 240
tatcacaag gacaacattt tgggaaggct tagaactttc gacaggtact atgaagtcac 300
taccaagata ctttcccaaa gtggtttttg gtgggattgg gtgaatcata agctatcaat 360
ggatagtgat gatgtctgga tcaaataatgt ggaggctaata aagaaagaga aaggattaac 420
ttcctacaag a 431

<210> 469

<211> 416

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-F4

<400> 469

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ggcgcccccc tatctcataa gctcctcgag tatcttctga cgtggactcc aagactccag 120
gatgataatc ttccaaaaaa tcatgttgcc gaaggtttca ttccgtttg actccgtttg 180
atattccttt tcttcgaaat acttaaacag gcaat'aaac aacaatatgg gctgggcctc 240
cggttaatag gttagtccca aaagtaatat aaaagtgtat aataaagccc gtaatcattc 300
aaaacagata ataaaatagc atgaatgctt cataaattat agatacgttg gagacgtatc 360
agcatcccca agcttaattc ctacttgtcc tcgagtaggt aatgataaa agaaag 416

<210> 470

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-F5

<400> 470

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aagctagtc tctcctgaa gcagcagtg acaacgctac tggattctat caaagcgact 120
 tgatagaaca ccatctgcc aacagcccct atgcatctct cagacacata acagacgctg 180
 cagcaggatc atcttcagca cagccacacc tcactagggt gatcatgaac actctcagca 240
 tcccacatct ggtgcccctg acattgttcc ctctacccc atctgcccac gagcttgctc 300
 cttacaatac atgcatcgt ccaagtgcac aattatccca cctgaccata gatccatcaa 360
 gcatataaat atttcgcata aaatcagagt caccttttct cctacacaga ggatatccat 420
 g 421

<210> 471
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-F6
 <400> 471

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 tcgctcgaa gtgctacccc accgcccggc aggcacact tccacacctc ttgttattct 120
 ccaccgacta cagccccacg ccacaccaga accacttata acccttgtag tctctcaat 180
 ctgcgactcc actgcccgat ctcccatct ccgggtcggt cctgtccggg gcctcgccga 240
 cgtccacggc ctgcgcgcgc tcgacgtggc gtggtaaca aacaaggta tcggaagagg 300
 actatacgtg gagagcctga tggctgggac ccacaaggta catggttgca cgcaaggaaa 360
 gttcctcctt attaaccta gaagatgttt cctccccctg acagttggga ccca 414

<210> 472
 <211> 352
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-F8
 <400> 472

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 tgaatactaa gagaagtttg atacttgatg attgttttga gatatggaga tagtgatatt 120
 aaagttatga tagttgagta gatgtgaaag ttaaaaatac ttgtgttgaa gtttgcaagt 180

cccgtagcat gcacatatgg taaaagttgt gttacagatt tgacatatga ggtgttattt 240
gatctgtcct ccttatcact ggcggtcggt gacgagcggg ggtctttttc ctacaactct 300
agccccctac gagaatgcgc gtaatacctg gcatctgact acatgtagat tt 352

<210> 473
<211> 293
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-011-Q1-E1-F9
<400> 473

ggtccagaat taccgggtcg acggcggatc tccttccgga gatcacggaa agctacacgc 60
ccccctacctc tgtcacgcct agcaaggcgg cctacaccga ggtgtcgtca cacaggacat 120
cgcccaatct gccacaagca caaggtggtc acatgacccc tccgggttct ccataccccg 180
ccttcgaaca gggccatgtg gacgagtcgg gcgcccactg gtgttcggcc ggaggagtct 240
gacgttttgg catgccgacc ctctatctca gaagagcatc acgtgttaat gca 293

<210> 474
<211> 433
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-011-Q1-E1-G11
<400> 474

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gtttgtagat tatataacca acgaagaggc tcggagtcgc cgccgcggag tctaactgtc 120
ttgtgacgaa aggcgggtgtc ccccccaaaa ctgtataaaa gtgaggaaga ttggtttagt 180
agtgcaggaa ttatggcgtg gcgtggcatg gcgcatccac cggtttttgt cgcagcggat 240
gtcgcacccc tgaagcagcg gctttgaatc gcagtcggga gtttgctang tccccccctc 300
ttttgacccc ccgaactctg tacagataga tgtggggagt tgatgatgac tggatgatga 360
tgcttttggg ttggttttct gtaaagaaca ccaattgtac agtcggatgg atacttgtgc 420
tagttctgca tgc 433

<210> 475
 <211> 177
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-011-Q1-E1-G12

 <400> 475

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 cgaggaggct cggagtcgcc gccgcggggg cgcgctgtct tgtggcgaga ggcgggtgtcc 120
 agggccaggc tgtatgaggg tgaggcagat tggcgtagt ggtgcaggaa ttatggg 177

<210> 476
 <211> 410
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-011-Q1-E1-G2

 <400> 476

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 ggtgtgtgcy atatacgaca tgcgggttcac tcggatgaac tatttgcatt gatacaagag 120
 aacagaaacy gttcaatata acaaatacca taaatattgc aagggttcaa ttcaaagatt 180
 acaatgcccc aattttctgt aaggggtcag ctgttgacaa gtcattgtatg ggtttgccac 240
 aatgacttcc aattactctg tcatatgtc ttccaatacy aagtttagct tttttggagc 300
 ctcttccatt ctacagtacc tgccagctct gatcaacata ccattcatct ttctaatta 360
 aatgtgtgtt caacctcagt accctcaaca ccctttctct ggcaagaaag 410

<210> 477
 <211> 425
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-011-Q1-E1-G3

 <400> 477

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 attctcgag ggcggccctt tcttaccatg ggaagaaggg atgtcagctt ctcttccct 120

tttgtcttcg gaagagggag ccctagtctc cccggacaca gtgtgtgatt tgcctccagg 180
 atggaggccg ccttcggctc caccgctctt ctcatctctc tcctccaccg gcacctggta 240
 tggcgccggg accagcatcc atgctagtat gggactagct gagtcctcaa caagaggagc 300
 cgaacacctg atttgctcag ccttctttat ccagccctgg aaaaagatgg ttttctcagc 360
 atcttatcat gagatgtgta tctaacttgt gtttgagaat tgagtgtcta ccgaggtatc 420
 cggaat 425

<210> 478
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-G4

<400> 478
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 tatgtgtttt gcttggagcg tcattttatt ttattttgtt tttcttgctg tttaaataaa 120
 atacaaagat ctgaaattct taaatgtag agagtcttca catagttgca taattattca 180
 actactcatt gatcttctact tataatcttct ggagtagttt gtcgttgctc tagtgcttca 240
 cttatatcct tttagagaac ggtgggtggt ttatattata gaaataattg atctctcatg 300
 cttcacttat attattttga gagtccttta gaacagcatg gtaatttgct tttgatataa 360
 taaaaaaaac tttcatataa gtgcattgaa aaatatgaga agtttgatac ttgatgattg 420
 ttttgagata tggagat 437

<210> 479
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-G5

<400> 479
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 cctatcacgg taggagacta cacggatttc ttttgttctg tgcaccacgc aaggaaactgt 120
 ggattcatct tccgtggacc acagactcca gtcaatccga attggtttca cttaccagtt 180

gggttaccatg gacgggcatc atctgtaatc atatctggaa cagacattat tcgacccaga 240
 ggacaaggtc atccaacagg aagcgtcaa ccttatttcg gtccttctca aaagcttgat 300
 tttgaacttg agatggctgc cattgttggg ccagggaaatg aactgggcaa acctattgat 360
 attgctgacg ctgaggatca tatatttggc 390

<210> 480
 <211> 399
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-G6
 <400> 480

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 atacctgatg gtcgccgaga tgtcgctagg tgggcgacgg gaggccggat ctgccacac 120
 tacgacagcg aggaataaga ggtcggaggc cctccctcgc cagcgggtgct tgggaaagaa 180
 cgacaaggaa ggctgatcgg gacgcgcca gcagtgggta agagccgctc cggaggacga 240
 ccgcatgaac gttgcacctt ctcaccttcc ctggcagaga ggatccggat ggatctgtga 300
 caagcgggtga gaagagagag agagagtgtg tggccaccgc tgcgtgttt agatctggag 360
 aggccgagac aggtgtgaag agagcaacac tagcaacca 399

<210> 481
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-011-Q1-E1-G9
 <400> 481

gggtcgacgg ggattattat tcccatacgt tgtttgctca caaaatccct atgcatagga 60
 agtggggttag acttaaagt tctagtcata ttcttcatga tgctctcttt atgtttcaat 120
 tcttatcttt tatgtgagaa tcattgaaat catcatgcct agctaggggc gttaaacggt 180
 agcgttggtt gggaggcaac ccaattttat tttgttccct tgctttttgc tctgttttag 240
 taataaataa ttcataaac ctctgttttag atgtggtttt atgttttaat tagtgtttgt 300
 gccaaagtaga acctttggga agacttgggt gaagtctttg tgatcttgct gtaaaaaaca 360

gaaacttttag cgctcacgag attagctgcc attgtttact ggagagtgc tttaggttga 420
tta 423

<210> 482
<211> 423
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-011-Q1-E1-H11

<400> 482

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acgcccagga gtagtttagg aggatccan gcangaggcc tgtgcctctt tcgatctgta 120
tcccagtttg tgctagcctt ctttaaggcaa acttgtttaa cttatgtctg tactcagata 180
ttgttgcttc cgctgactcg tctatgaccg agcacttgta ttcaagccct cgaggccct 240
ggcttgatt atgatgcttg tatgacttat ttatgtttta gagttgtgtt gtgatatctt 300
cccgtgagtc cctgatcttg atcgtaaca tttgcgtgca tgattagtgt acgattgaat 360
cgggggcgtc acacgatgcg cctccccact tgcctggtaa aatcgctttt tccccaagcg 420
ccg 423

<210> 483
<211> 471
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-H3

<400> 483

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aatagcccaa acggcggggt tatgtccaag aatatgcatt ttcatttat gcttccaact 120
agcaaaatth gtaccatcaa agtaaggacc tctacggtgg taatttcctt cgctagacgc 180
catactctcc taggttgatga aaccaaggct atgaccaaca aaagctatgg aaatcaaagc 240
aaatggagac caaggctctg ataccacttg taggatcgaa agtatgtcta gaggggggtg 300
attagactac ttgaccaaata aaaaatctag tcttttccca attttagttc ttggcagatt 360
ttagcaactt agcacaagtc aagcaatcaa cctacacatg caattctaag agtatagcag 420

cggaatataa agcaattgca tatgaaggta aagggaagag aatgggggaa c

471

<210> 484

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-H5

<400> 484

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aaaatgagct cgtgtgcat cttgcgaggc atcaaaaccc aatcattttc gttcgtatgt 120
acatcccaca tggatgaatcc cagaaaaaca tttatgtttg tatgtatatc aaacacagtt 180
ttttgtgttg aaacgtttat gcaagggtggc ctaatgcaaa cagttatctg ccagaagttg 240
tgtgtgattg ttatttgatc gaacacgact actttctaga aaccatgtcg gttgtttgag 300
ttcatcgctc atgggtgctat ctgagtaacc gtatgcaata gcaaacccca ataagtaggg 360
taattagctt attattgata atccatgtag taatcaaatt gacatttctt atataacaca 420
ccagatattt c 431

<210> 485

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-011-Q1-E1-H6

<400> 485

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gctatgtgca ttctcaatg caatctctca gaagggtgatc gatccagaaa tcataccaag 120
gctaaggaat gatgtggcgc aatgtcttgt cagtttcgag ctggtgttcc caccatcctt 180
cttcaatata atgacgcatg tcctagtcca tcaatcgacg agattgtcat tctagggccc 240
gtatttctac acaatatgtt cccctttgag aggttcatgg gagtcctaaa gaaatatgtc 300
cgtaaccgag ctaggccaga aggaagcatc tccatgggccc atcaaacaga ggatgtcatt 360
gggttttgtg ttgacttcat tcctggcctt aagaagat 398

<210> 486
 <211> 418
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-011-Q1-E1-H7

<400> 486

taccagtcca gaattcccgg gtcgacgggg ctagcctccg gatccatcca tccgcccctc 60
 gctgccgctg cgtctcgtct ccaccacca acttgcccc ggactcagga ggatcgctcg 120
 agatgtcgga caccgatgag caccacttcg agtccaaggc cgactccggc gcctccaaga 180
 cctaccgca gcaggccggc gccatccgca aggggtggaca catcgtcac aaggcccgtc 240
 cctgcaaggt tgttgaggtc tccacctcca agactgggaa gcatggtcac gcaaagtgtc 300
 actttgttgc cattgacatc tttaatggaa agaagcttga ggatattcgtt ccttcatccc 360
 acaactgtga cgtcncccat gttgaccgcc aagattatca gctgattgac ataactga 418

<210> 487
 <211> 414
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-012-Q1-E1-A1

<400> 487

taccggtcta gaattcccgg gtcgacgggt gaagaagacg catcttgtca aggtgtctcc 60
 ggcggacaag tcgggagctg ctgtgcgaga acggacctga gctgtgtgcg gtggtgtcat 120
 aaggagccta tccatctcca ctagaattat cccaagtttc acttcacatc gtgatgttgt 180
 tttacctttt tctgtcatt gtctgtctat aacggatagc gctccctgtt ggccgcccgg 240
 ccggcgggga tgccctagtg gtggagggtg tatgtcctct tccgcggggg gccctgctt 300
 gtacctagat ggttactctt tccgtccatt gtcaccggct aacattgtga taatatcagt 360
 ctgggtaatg ttagattaag ctgttgcct cgcctgaaaa aaaagaaggg gggg 414

<210> 488
 <211> 378
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-A4

<400> 488

ggctctagaat taccgggtcgc acggggcagta ccagatcggt gagcgtttat tcaactttgc 60
atctctgaat tgattattgc tgaccatttt tgctaccata ttataagcct tcccagctcc 120
acatacatct acgtcgtgcg gttgagtctc cctggtaatc gctctatcca agctttgaga 180
gtttttgact acaacgattg ccgatcaccg cctgctgctg ggtaagaact ggtaagaatt 240
tgagatttgc ttgacggatt tgtgacaccc accaccacct cttggtagta gtctgtagga 300
tcatattctt gtgtgtttct attgctgcta accatgccag gatcacaagc cgatgagact 360
gactgggaga acatgacg 378

<210> 489

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-A5

<400> 489

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ggccatggag cttcttagcc taccatgaac gatgaatgac tatgatttac cctacggcac 120
gaaggaatgt aggaaggagg aaaacgccac cggcgatgga taaatcccc ataatcgga 180
gtcctccac gtcccaaggg atggatgacg tccatcatta tctaattgat aaatgagccc 240
cttggtgggg tactaagatc acacttacct caatgacgat caggaattac gatggcaaga 300
acgccgaggc ggccaagag ttcaggaact gccgtgcgtt cacatgcgag agaccatctg 360
tgtttacc 368

<210> 490

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-A7

<400> 490

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tctgaagcac agcctgaaga ggaacttatt atctctgcac caaatcaacc tgaagacaat 120
gctcagaccg aagacaatcc tcccaatgat gacaatgatc agcaagagca aagtcttcat 180
cctgttcatt ctcgtgttgc aaatgaagta caaatcgaga agataattga cagcatcaat 240
gcgtctggtc cgcttactcg ctcaagagca acacagctag caaacttcta tgggcacttt 300
tcatttgtgt caatatcaga acccaagaaa gttgctgaag cttttatgga acctgaatgg 360
attcaagcca tgcaagaaga acttcaacag ttcaagctga acaatgttcc ggaa 414

<210> 491
<211> 449
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-A8

<400> 491

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cacagcccta gcaagtttag cagatccaga gccgaagatg agcgggggtga agaagggtgac 120
ggacgttgcg gccaaaggccg ggaaggcgat cgactgggac ggcttgcca agatgctcgt 180
ctccgacgag gcccggaagg agttcgccaa cctccgccgc accttcgagg acgtcaacca 240
ccagctccag accaagttct cccaggaacc aaagccaatt gactgggaat actacaaaaa 300
gggaatcaga tcgaaagttg tggatatgta caaggaggct tatgatagca ttgagatccc 360
aaagtatgtt gacactgtca ctctgagta caagccaaag tttgatgctc tgtaaatcga 420
aatgaaggaa gcagagaaga catctctga 449

<210> 492
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-B2

<400> 492

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atttatccgt ggaatgggga taacaagatg tgacaatagc ttaattcctt tcggacgtct 120
tgaatatcac atcagagaag aacttaacat aacagcttct cgagccatgg ttgttctgca 180

tcctctaaag gttgtaataa ctaacttggga acatggaaaa gtcataagacc ttgatggaaa 240
 taagtggcct gatgctcctg ctgatgaacc ttcgtcgtac tacaatgttc ctttcacaag 300
 aactgtctac attgaaaaag ctgattttcg cctacatgac ccgaataact attatgggct 360
 agctcctggt aaatctgacc tgctaaggta tg 392

<210> 493
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-012-Q1-E1-B3
 <400> 493

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 atgcagaggg ggcggcaggg cccttgggtg gaagaaatga tgcgtgataa ggcaccaacg 120
 agctcatccc catgattgag gccgcggcag tgcaggttga gaggggcgga acgccagagg 180
 tggcgccacc gggacgcgag gatctgggtg cgggcgccgt ccttgggtggg gaggagcgag 240
 atgatctcgc cgaggacggc gtcggggagg ttgctgatgg tgtcttgagc cggcggttca 300
 gattccgcca actttcttct tcgggtaata gggccgccgg ccggcggcag tagcggaaga 360
 ggctcgcgcc gcctcatatc tcagatgcgc accgcaa 397

<210> 494
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-012-Q1-E1-B4
 <400> 494

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 ggagacgtag gatgggagtt cggccaaggg gaactgatag ggaggatagt gtacggcgaa 120
 ctgtctatgt ctcagacatt gatcaacatg tcaactgaaca gaagcttgct gaggttttct 180
 caaactgtgg tcaagtggta gattgccgta tctgtgggtga tccaaactca gtgatgcgct 240
 ttgcttttat cgagttcgcc gatgatgtct gtgcaagagc agctctaacg cttgggtggaa 300
 ccattcttgg tttttatcct gtcagagttc tgccatctaa gactgcaatt ttgcccgtga 360

accccaaatt tcttcctcga actgaggacg acaaagaaat ggtatc

406

<210> 495

<211> 424

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-012-Q1-E1-B5

<400> 495

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catgcctcat gggaaagatg actaaaacgc cgttctccgg aactatggag cgagcaactg 120

atttgttgga aatcatacat actgatgttt gtgggtccaat gaatgttgag gctcgcggcg 180

ggtatcggtta ttttctcaca ttcatagatg atttgagcag atatgggtat atctacttaa 240

tgaaacacaa gtctgaaaca ttgaaaagt tcaaagaatt tcagagtga gtggaaaatc 300

atcataacaa gaaaataaaa tttctacgat ctgatcgtgg aggagaatat ttgagttacg 360

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caaa 424

<210> 496

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-B6

<400> 496

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agaactaatg tgctctcaga cggagccttc tgaacttccc aaacaccctt cattcaacat 120

ggtctatttt taaaatcctt gaaatttgca agtaggtggg catgcccatt gtaggcctcc 180

atgtcagatt tgaacgattt ctacaccgtg tgcaagttgc gacacgtcca accatttatc 240

tgcttttttt atcaagaaaa ctctagaaaa taaaaaatt accaaaaata gaaacaaggc 300

atgatgcctt aaattgatca tacaaggcca tggggagaaa tggggccatt ttaaagatgt 360

caaagaacaa cgaactctag gacagagcct tctcgccttt tgacaccatt tgcaagttgc 420

gacacatt 428

<210> 497
 <211> 369
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-B7

<400> 497

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 cggcgccgcc gctgcgcaca gaacacatcc tcgccagcgt agcttctccg gcgtccggcc 120
 aacgcgctca ctagectccc gccttctctc acatctcttc gcctccaccc catccagttc 180
 gtgccattcg ctgctccaag acaagggcat ggcgctcggc ggctgcggca acgaagctga 240
 tgggtgcacga gccaaacctg aaggcagtag cacggggcag cgacagcagc atggagggcg 300
 tcctcttgtt tgggaaggta atggaactgc aaataggagt ggcagcggcg accaagatgc 360
 aaatggaag 369

<210> 498
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-012-Q1-E1-B8

<400> 498

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 gggcagccac ggcggcgcg gtcggcgcgga tcaaggcggc ccagaacagg atggacggga 120
 aattctgcga tacctatgtg tgaagcgtgt gtgttcaaga aaacatgccc ctttctctta 180
 actgtacatt agggtagtgg aggccaataa cactaatcgg tgagagtttc agacgacggc 240
 gacgacgacg accggggcg cacaaccgct tgctccgagt ccgtgagaga gaccagcaac 300
 aaggcggggag cctccgagga gcggagctga caagttttgc atttcaaaaa cagctcagat 360
 cctgcgacga tcgcgatcgc gatcatcggc ggtcnccttc ttcgccccct tccttcagc 420
 aagctg 426

<210> 499

<211> 420
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-012-Q1-E1-C6

 <400> 499

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 caacgatagt aagctccaaa acatgagctg gttctgctac aaacatgtga acacgttgct 120
 ccagacaagc atggccacat agtagtctta taattaaaca ctaccgagtt caggtgggga 180
 accatcatca aggatatcga agtctttacg caagtccatg gattagatcc caagcataga 240
 cttcttttcc ttgaacaagt caatcagtggt cttagtgtgc tagggacaca tatagaatga 300
 aggttgcaag cctccagact acagaataat tcgcacgtgt gcatgactga tttgggatga 360
 ttccaaagga aacaaaacaa tcttctctga attcatggcg gcaacttaca tccggtgcac 420

<210> 500
 <211> 426
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-012-Q1-E1-C8

 <400> 500

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 cgagtggcgc tgatggtgaa ggtatgacca atgccatcca ccttggagga caccttcttg 120
 gccacaggtg gagctgccat tgcattctta cacttgccgg tggagctcga tggatgcatt 180
 gctacagtag cgcagcactc cgaataggtg cgcttgccag agtgggcatc aaagctcttg 240
 ccggacatgg tcttcttcga cccgggagct tcaccagcaa gtatcttgct ctctgcagct 300
 gctgctgctt cccggtagac cttgtcggca cacataatag catccttctt gttgccactg 360
 acagagatga cacttattgg gcctgacatt ttcaatacgt gctacgcata gtgagaggct 420
 gccatg 426

<210> 501
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-D1

<400> 501

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cggctcgcag atcttctccg agggcggcct cgattacctt ggaaacccca acctcgtcca 120
cgcgacagagc atccttgccg tgctgggctt ccaggtcctt ctcattgggtc tggttgaagg 180
gttccgcacg aatgggtctcg acgggtgtcgg cgagggaac gacctctacc ccggcggcca 240
gtacttcgac ccgctcggcc ttgccgacga ccctgtcacc ttcgctgagc tcaagggtgaa 300
ggagatcaag aatggccgctc tcgccatatt ctctatgttt gggttcttcg tccaagctat 360
cgtcaccggt aaggggccat tggagaacct gtctg 395

<210> 502

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-D3

<400> 502

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cgttcattgg taactttact tggagcaata tttttatttg ccacatgata tgtgttttgc 120
ttggagcgtc gtgtattata ttggctcttg cttgttagtt taccacaatc atccttgctg 180
taacacacct tttgggagaa gcctatttga ttagaatttg ctagaatact ctacgtgctt 240
cacttatatc ttttgagctt gatagttttt gctctagtgc ttcacttata tctttaagag 300
aacgacggcg gtgtcttaat tttgaagaaa ttgctagtct ctcattgctt acttatatca 360
ttttgagagt cttttagaac atcatgggtat ttgctattgt cataaagttg gtcc 414

<210> 503

<211> 425

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-012-Q1-E1-D4

<400> 503

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 tggcggttggt ggcgtctaga agcttctagg tgaggcggca ccgccttcta gggtcattggc 180
 tgccgtgccg cgctgcgccg cccgtcgga ttcatttcag tcgatccatc aaatccgttc 240
 cgttccttcg ggtgacattt tctatttctt gtgttcgttt gtagtagtag tggtgataat 300
 aaaatgacgg tctcctcac tgtggtgcaa gagagtggag agccctccct agccaggcag 360
 gtcctcttct ttctgtgtac aaaggcttga acttgaagtt ggtactaaat aaataaaacc 420
 caagc 425

<210> 504
 <211> 399
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-012-Q1-E1-D5
 <400> 504

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 ttttgatata tttggtacgc tagatcattg cacatcccg tagaccaccg gaggcattcca 180
 tatagagtca tactttgttc tagacattga gttgtaatat tgagttataa gtaaataaaa 240
 gtgtgatgat catcattatt agagcattgc cccagtggag aaaggatgat ggagactatg 300
 attcccccat aagtcgggat gagactcccg acttcacaaa agaataaaaag aggccaaata 360
 agcccaaata aaaaaaagag gcaaagaagc ccagcgaaa 399

<210> 505
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-012-Q1-E1-D6
 <400> 505

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 accatctcct ctgtctgaga ttttaactcct tctgcgtgaa aatgtacttc aaactcttgt 120
 gatccgtgta cacctcacia tggtttccga tgagaaaatg tctccatgtc ttcaatgcat 180

gcaccacggc tgctaattcc aaatcatacg tagcataatt cttctcatgg ggtttaagtt 240
 gtcgtgaagc atacgacaca acttttcctt cctgcataag cactgctcca agtcctcgac 300
 gtgaagcgtc gcaataaact tcataatcct tgcgttgatc tggcagaatc aacactgggtg 360
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 atttggtgtc cttc 434

<210> 506
 <211> 354
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-D7

<400> 506

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 gatgaactaa gcctagccct ataagtattg tcagagcata tgccatgtag tttccctttc 180
 agtctgtcct gattttgacg aggaactcga acccttttag cagcactgtg gaatcgtatt 240
 gtgggttttct gattcgtgtg tccgttctcc agacttctgc aaagatcaga tgagggtttac 300
 ccatgttttg attctatata gttttatgtc ctttgtcgag tcaaaaaaaaa gaaa 354

<210> 507
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-D8

<400> 507

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 agtgttgggc acccacacgc ggcgcttctg aggaccagca ccggatgagg aacccatgtc 120
 acggccatgc ttgcgtgttg catcataatc agtctgacca gtttcagcac tgatggcctt 180
 gttaacaagt ttctgaaagg atgtgcactc atgcagacgg aggtcgcggc gaagctcagg 240
 actaagcccc ttaagggaacc ttgcttgctt cttggcatcg gtagaaactt cctcagtggc 300
 atatcgtgcg aggttaccaa actccctgct gtaagcatcc acacagagtc ggccctgagt 360

gagactgcaa aattcctcac gtttacgggc catgagaccc t

401

<210> 508

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-E1

<400> 508

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gggcaccatg gtcactgtgg gagcacgccca aaccgaaggc catcaccagc cactggatag 120

gtgagcaaat ccattctcct atcagattca gatatctttg ggtagtcaag gtaaatacctt 180

tatgcttgag ggtaccataa ataggctatt gattgaatga aacttgtggt tggctgctat 240

tgtgttgttt gatgtttggt tcagaggaaa aattgcattt atttatatag aagggtactta 300

gtaaaattca gtctgattta atcatcactt cagggttatg tatctctgta cgtatagatt 360

tccatgttta gagaaaaaac tgtatgttaa aacaagatgc t 401

<210> 509

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-E2

<400> 509

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acgggaataa gttcatctcc aacaatgatc atcagaacgg acaccttcaa ctgtccacgg 120

gcatctggcc agatgccggt catccaatgc taacgttcag gatttctcct gttgaacctt 180

ttagctagta ggtttttcga atgggcgatt gcctaacttt atcatataga tagaagagag 240

gtacagtctg gttatcagtc taagcgact agatctgatt actgtctaaa gcagccattt 300

acagccttac aataggaatt atacatgtac ttccggtgct ctacactat gctccgagct 360

ctacatgtca accggccgca ctccaaatag caatatcttc acagacgaaa tccagcacc 420

tgtcggagct gcttgccatc tgatca 446

<210> 510
 <211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-E3

<400> 510

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 cacccttgcc gttttattcg cctctctttt cccaatctca tcctctcttt ctcttttgcc 180
 tttttctcgt ttgtcttttt gttgcttggt tgttgatta cttgttacca tggccgaatc 240
 aaaaggaact aagggaatttc tcccgaattc tagtgcttg gataaccttt ctatcctttc 300
 taagctcata aacaatgatg ctacagagag acccaccggg atcaccaata agaatttaga 360
 tgattttgat gatgatgact ccggaatctt tcgctattta cttgatgaat ccttaaa 417

<210> 511
 <211> 408
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-E5

<400> 511

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 attttgagag tcttataaat agtatggcag gttgcttggg ttatgaattt agtcctaata 120
 tgatgggtgt tcaaggggga tataataaaa actttcatga agatcattga atagatgaga 180
 agtttgatac cttgcatttg ttttgcgata taaagatggt gatattagag tcatgctagt 240
 gagtaattgt ggtttagtaa gaatatttat gtttaagggtt gtgattcccg aagcatgaat 300
 gtatggtctc tcgttatgag atgaggttgg agcatgattt tttattgtct tccttatgag 360
 tggctattgg ggacgagcga tggctctttc ctaacaatct aacccct 408

<210> 512
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-E6

<400> 512

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gagttttctc aagagattgt tgtctctcca attgatgcag gtcttgggtg aatattctga 180

ggctcaaag gcaatccaag aggacgggca gcaacagaat tccttattta gagagacgca 240

ctcagagctg tttagccagc tcaatgatgc tctcttgagg tttgaagagg gtcctccggt 300

tacacttcaa aggttttgtg agattttgtt ggatccaaaa ggaacataca caaaattgtc 360

gaagcttgct ttggccttgg agaagaacct cctagtcacg tctaccataa ctaagtgtac 420

tgaaccctac cctactgctc at 442

<210> 513

<211> 404

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-012-Q1-E1-E7

<400> 513

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gtataccact tcgtcatcag gtggttacct atctcattat ctccctcggg cataagtggc 120

acccgacggg gtttccgaaa agtcttttga aaatactttg tctccatcac catgcacatt 180

cccgctccctt attgtgtagc aactacttta gcacccctatc tactcccacc ggcataaacc 240

tcataagaag gtaggggtcat gcacaatgca agtatcaaca atgaggaaat ggaggcaacc 300

caccaaagtg gctaccatct catcatgatt ccgatgcaac aataataaag tgctatatga 360

aatgcataaa aatggtttca tagacatggc caaagggtg cttg 404

<210> 514

<211> 375

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-012-Q1-E1-F1

<400> 514

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gaagacgctg ctgttccagc accgggacaa gaagctgcct tacaagaagg tgggccagct 120
ggcgctggac atggcgagag ggctgagcta cctgcacgcg cagaagatcg tgcaccggga 180
cgtgaaggcg gagaacatgc tgctggacag gaagaagtcg gtgaagatcg ccgactttgg 240
ggtggcccgt gtggaggcgc aggacgacga caacatgacg gggcagacgg gcacgctggg 300
gtacatggcc cccgaggtgc tggaggggcg gccgtacgac cacaagtgcg acgtgtacag 360
cttcggcgtc ctgct 375

<210> 515
<211> 388
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-012-Q1-E1-F3
<400> 515

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cggccatgca caaggtgcgc tccgagaagg accgcaagat cgggggagag atgagctacc 120
tcgagaacat gatcaggggg aaacaagctg agcgctacgg cctatgtgac aagctcgctc 180
atgctcagag cctgaaggtc gtggaaggcg gatccacctc gctgaacaac ggtctggacc 240
tcaaacttgg attcaactag gaacgggtga aagcttcttg ccgtgggggt ctgctctagt 300
gttgctgttg agctcgagtg ttatgtcagg ttcaaatatt ctgcaatttc cttcgaaggg 360
attgtatgaa cttgtaagag accactgt 388

<210> 516
<211> 428
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-012-Q1-E1-F5
<400> 516

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ccaagtgcg catggccaaa gccaccaaca aggtaacccc caacatcaaa attaccatca 120
ttactaatcc ttccttgatg gattgcattg acgaaagtga ggggtctaata gaggaagtaa 180
atgaatttga gtcttttatg agtaagctca agggaaaatc caagaagcac ctcattgctg 240

tcttgggaaca acttgggtgaa gccaatgaca tgattgaggc tcaggaagac accatctata 300
 agatggaagg tcatagtcgt gactgtgcga tgagatatcg gatctctcca atgctcttgg 360
 ggaagagcgt gttcatcatt tgactcttga ggagtcacac aatgatgacc atgccaaatt 420
 aaagaaag 428

<210> 517
 <211> 461
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-F6

<400> 517

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 agatggccgg gaaggggaggc aaggggctgc ttgcggcgaa gacgacggcg gccaagggcg 180
 ccgccgacaa ggacaaggac aagaggaagg cgctgtgtc ccgctcgcc cgtgccggga 240
 ttcagttccc ggtggggcgt atacacaggc agctcaagca gagggctctg gctaattggc 300
 gtgtgggtgc cactgccgt gtgtactctg cagcaatcct tgagtacctc actgccgagg 360
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 aactgcagct cgcgattcgt ggagacgagg agctggacac c 461

<210> 518
 <211> 405
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-F7

<400> 518

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 gagatgaaga agaaaatgga ggatatgctt caaagtgtag tgaaaattga gaatgcttgc 180
 ttcagtgttc atgtgagagg atctgaatac atccctatgc tgggaacatc tggcgagtca 240
 gactacgcct tcttcgggtgc cgccgattat gaccaatgaa gccagactgc ctaacaggca 300

tgtttctggg acctatctca aaaaagaagc tttgaacacg actattatTT gttgcttgTg 360
cacatcacac cgtagaacat gtaatcccgg ccctcagcta cctgt 405

<210> 519
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-012-Q1-E1-G1
<400> 519

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acacgtgtga gggcgacccg gaggacacgg tgagcgatat gtccgattga gctcgtgctt 180
ccttgTcgTt gaccctacat gtgaaagctc gggcacggcc ctgaaagTtg taagagcatt 240
ttgggagggg gagccctca tgtaaataga ttactgcctc tattccttaa gccaagctgg 300
agatttattt ttatgatccc gcgagtctcg ctgcgagctt actactgcaa ttaccttat 360
tcagggccag ttcccgaTg gctcatgacg tcgtgagctt tttaggggGc tgctg 415

<210> 520
<211> 398
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-012-Q1-E1-G3
<400> 520

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tgTtgaaaaa gggcggtcag ccggccatgc cggcatatat gggTcgGcgC gTtgggcaca 120
ctgccgaccc aaatctcaaa tgggacggac gccgagcgGg tgaccacca aacggataaa 180
aaacggacaa aaacaccgTc cgTttggTcg gcgcgTtGga gtaactagTt caacttctcc 240
gaagagagcc taacgcccTt aagagcatga cagacgGcac ggcgacacac caaaggccga 300
atcccttgTg tgccaggccg ccccatgacc ctTcgTgctc agccttggtg tagcgccgac 360
gaaggacatc atcaccagag gagcctgccc tgctgctg 398

<210> 521
 <211> 374
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-012-Q1-E1-H1

 <400> 521

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 tacctgaccc tatgctttgc cctggcctca tctgccgtgg gtgcttacct gcacattgcc 180
 ctgaacatcg gtgggatgct gacaatgctc gcgtgtgttg gaaccatcgc ctggatgttc 240
 tctgtgccag tctatgagga gaggaagagg ttggggctgc tgatgggtgc agccctcctg 300
 gaaggggctt cggttgacc tctgattgag cttgccatag actttgaccc aagtatcctc 360
 gtgacagggt ttgt 374

<210> 522
 <211> 385
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-012-Q1-E1-H3

 <400> 522

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 atgcattgtc tgggtggagct ggaaaagccg tgtcaacagg aagcaagatt gcgctggaga 120
 gtccaaggac ggcggagaag ccatcggcag gcgacatcgt gtcgatgggtg atgaagagga 180
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 ggatttttgg atacgtgcga gaatccagtg gtaaacaaga gaaggagaag gagggcctgg 300
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 gtgctgcaga tgcgccggtt tctgc 385

<210> 523
 <211> 422
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-012-Q1-E1-H5

<400> 523

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gtcctaggat agagtgaagt tccacctgta tgatatatcg agtctattgg gaataaatat 180
gaggcttcga atttaattga gcgatcactc cgctaattct gggctcgtca tagcttctgg 240
agagaatttc ggataagtgc tataatccac tggaaaacac tagaaggaga aggaagatct 300
gacatcaact atcgagaggg agaaaataga gagcatttgt gtcgtgctag ttgcttaaca 360
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tt 422

<210> 524

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-012-Q1-E1-H7

<400> 524

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aatatctggt gcagccgctt ggcctgtgctg aagacgaaga gcattccagt gactttgagc 120
cagaagaaaa tggatgatgg gctgaggacg aggagattga ggatgatgat gctgaggatg 180
gtgaggattc tgtcaaggcg caatcctctt cgaagaggaa gaggtctggc gcggaggatg 240
aatatgatga tgacggtgat gatgatggtg atgatgatga gaagcctcca tcaaagcgat 300
agtcaatttg ttcttgctga tctggtatct tttctgcttg ggccaagaag gaaaataatc 360
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<210> 525

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-A1

<400> 525

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atcgatttct taaactatct agcacattct aaaagggtgcc catgtatatc aatcttcatg 180
acatctgctg tatgttgta gtgtccattg caacattacc ctactcctga cgcactatgc 240
aatcgtgcac cagtagcatt tttggcaaatt attcaatgga atataaccagt gggtcacttt 300
tgcaagcagc accattatca gcttagacta gtcatagtc actaatagg agtccaccat 360
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<210> 526
<211> 432
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-A10
<400> 526

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ttttaattca aaaacaggat cacctttagg tggaggagga cctcctagag tttcaatacg 120
caaattgtgt ttaagtagag gacgttggtc aaagaaaata ttatctatct catttctttc 180
atgcatatgt aaatcatctt catgatcatt ttcaagggtgt gataaaaagt atcttctcca 240
gatcctcaac caccatctta atctgatgat aactagaata agtatccagg aaacatagcc 300
tctcacaacc cgtcgttaca tcaataatct ggtcgataga gggaagagaa aaaggatcag 360
ctagacacgc cttattgaga tctgtgtaat caacacacat acgccacgtg ccattctttt 420
ttagcacaag ca 432

<210> 527
<211> 429
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-A2
<400> 527

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ccgacgatca tcatatccga aaacggaatg gaccaaccg cgaacctgac ccgcgaggag 120
ttcctgcacg acgcctccag ggtcgagttc tacaagacgt acctcgcgga gctgaagaag 180

gCGatCGacg acggcgCGaa cgtggTCggc tactttgcgt ggTCgctcct cGacaacttc 240
gagTggctgt cgggctacac ctccaagttc ggcatcgtgt acgTCgactt caccaccctc 300
aagcggtacc ccaaggactc ggCctactgg ttcaagaaga tgctgcaggc gTCggggccc 360
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ggcagcaac 429

<210> 528
<211> 461
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-A6
<400> 528

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ttttttttat tcggaagaat ggaagcatta gttctgacgt tgtaggctgt acctaagatg 120
ctcatctctt cacatgtaga caattagaca aacactgtag ctctagcatt tgcttgtttg 180
tttagggctt agctgccttc ataattattt gattgatgtt ttattggat attcatattt 240
tattttggag aagctgcata tggTgcttga tcaaactcca tgaattagat aaactttcca 300
atttgataga gtaaattccat ccagttttatt acagcccttc ccattcaatt actcctgtat 360
gctaagtggT aattgatcac aatatagcgt cttgcgcgtg tacatcgaaa tggcgTcttc 420
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<210> 529
<211> 448
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-013-Q1-E1-A7
<400> 529

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gcaatggata ttgtttcgtc cacaatgggt ggatgttccc taccgaaaac catcatgctt 180

gttgtgagaa gctccagtta gtgaaaagca tataccaaac ctgccccaaa tgggacaaaa 240
 tttgtaccat ggcattgtga tgccgctcca tgatagcatg ccaagttcca tgaatttcag 300
 acgagttttg gatttactag aatttaaaaa tcagacatct caatgttttg cgggcaatec 360
 acggtgccct ggtgtttgaa attcattcnc atttcttgca tgggacctaa gcatgcaccg 420
 aaggacacaa atttgatttt tcaaccaa 448

<210> 530
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-A8

<400> 530

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 agttcccggt ttcaggtgct atcggtgac gactccgagg ccgactctc tcaccaaggt 180
 gaggaggaga agaaaaaggc ctctcccca gtgggggaga gaagaaaagg aaggcctccc 240
 caacgaggga ggccgaaggg tgcaagaagg gaaaaactct tccccgggac tgctctgcca 300
 acgccagtga cgacgacaag gactggcctc caagggccaa gccctggcg agatcgtgag 360
 tatccggact cccgaataac ttcattggtt ttcttttttg ccacacaatg tctttcta 420
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<210> 531
 <211> 367
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-013-Q1-E1-B10

<400> 531

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 ccccgacatc nggatctctt ccaaaggcat gtccatcatg aactccttca tcaacgacat 180
 cttccaaaaa ctcccccgcg aagccgcca actggcgcgg tacaacaaga aaccaccat 240

caccttccccg gggattttaa actccgttcg cctcgtcctc cccggcgaac tctccaagca 300
cgccgtctcc gacggcacca aagccgtcac caagttcaac tcctcgtaga gtgctcctgc 360
tcctgtg 367

<210> 532
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-B11

<400> 532

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gaagattttg agtctgatga tgaagagggt gcggggaaat ccggcggaga tataaggat 120
gaggattttt ttgaggaaag ctgtaagcaa caagtcaaga agagaaatgg tttcaciaaag 180
aaagtccact tcaaggatga attgcatgaa atggaagtgg ataacattga gaaggatgat 240
gtaaatgatg gtccagcact agaggatgaa caaggtcttt caactcatga aaaggggctc 300
ttgaagatgc gtaaccaa atagacataatg gagaaagcta gtcttgaacc cagtaaagtg 360
atcatgcagg gagagggtga tgcttcagg agggccaaaa atagtgcctt ggaagtggat 420
cttgattttg ag 432

<210> 533
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-B2

<400> 533

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atgagcgctt tctaagactt cctcaaaaata gtgctcggcc gatacccggc ctaccgccga 180
actctgggat gcaatagtgg tggcttccat ctctgcccag tatgtcttga cacgggcaag 240
agccatcctg gcaccctcta tgcacgccga cctcttcaca gcgtcgatat gcggcacaac 300
accaatgaat tgttgacta tgccaaaata actattcggc attggtcctt ccggccaaag 360

gtgatccccc atgaacctca tatcaagtcc ggacaaccta tggag

405

<210> 534

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-B6

<400> 534

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tcagcttatg cgtaaggccc ggttcaatgg tgggttctat gtcattcatg aggcaaacc 180
gctgtatgct gtcataatca ggcgtatcaa tgccatgcac ccaaagcaca cgaagatttt 240
gcaactgttg cgtttgcgac acatattcaa tggagtgttc ctgaatgtta ccacagccac 300
catcaacatg ctccacatgg tcgatccata tgttgcataa gggtagccga atctaagtaa 360
tgtgatggag ttgatctaca gaatagggtta tggcaagctc atcaagcaca ggattccatt 420
gaccaac 427

<210> 535

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-B7

<400> 535

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tgttggtttt atcacttcaa gatctttgaa actggatccc atattaatag gtttgactga 120
gctttttttc acgaagaaac caaaaaagat ccagaaaaca aaaaaaaca aactaaaaa 180
aaggaaaccg aaaacacgga aacttgtgca tatttgtgct ttctactctt tttcggaagc 240
acacttgtgc tttttcactt ttagagaagt acatatgtgc gtcacatga agcacatatg 300
tgcttttcac ttttcggaaa gcacagttgt tgaaagcata actatgtttt tttgactaac 360
gggaagcaca attgctcttc acgcagaagc ttttcacacg tgcttcacgt gagaa 415

<210> 536
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-B8

<400> 536

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 tgccatgtgt catgtgtgcc ttgctctcag cagggaagtt gagttgttgt atgttgtgta 180
 acagaacgat gctttctgcc tgtggatgta aaacataaga ttgtctatgt gtcacgactc 240
 aaatgggtatt gtcacttact catctctatt atggcaatgg cactttttgc tagaaacaca 300
 tatgtgcttt tcacttttcg gaaagcacag ttgttgaaag cataactatg tttttttgac 360
 gaacgggaag ctcaattgct catcaggcag aagcctttca aaacgt 406

<210> 537
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-B9

<400> 537

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 agctagtcca ccaacaatga aaggaaggag ctacaccgtc ttgaattaca acaccgaggg 180
 gaggaaatcg tctcgtgcc atggatgaat ctctgaaaga actaacgcac acgattagtc 240
 tgcacaagca ttgtcatcaa tcaccaaaac atattgggaa taaatatgcc cttacaacgt 300
 gaatgtattt gactttttga gccttggaat aattgagtg gagagagaaa atttctcgac 360
 tctagtgggg aagaacataa tggtcgggct ccggtgagat ttggatttag gaaggaggag 420
 cttgcacccc caagtccttc catctgcccc g 451

<210> 538
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-C10

<400> 538

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tattattcat gctagaattg tattaaccgg aaacttgata catgtgtgga tacatagaca 180
aaacagagtg tccctagtaa gcctctacta gactagctca ttaatcaaag atggttaagt 240
ttcctaacca tagacatgtg ttgtcatttg atgaacatga tcacatcatt aggagaatga 300
tgtgatggac aggaccatc cgttagctta gcataatgat cgttaagttg tattgctatt 360
gctttcttca tgacttgtag atattccttt gactatgtga ttatgcaact ccc 413

<210> 539

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-C11

<400> 539

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gtaaggttcc cggagtctac gatgactggg aggagtgtcg gagacagggt caccgattca 180
acggtaacag ttacaaaggg tacaccacta gggccgaggc cgaatctaga tacgcccgtc 240
atctagcggg agaggggagg gagcggttga ggaaccggat gaatacgagt ttcacatga 300
tgatgctcat cgtgatgacc gcagctctct tctatgtgat ggtagtttag atgatcgata 360
tcgacttgta atgtgaagac aaactcgcta ctgcgggtct cgagacttgt aatataatgt 420

<210> 540

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-C12

<400> 540

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 acccaaggcc gccgagaaga agccggtgga gaagaccccc gcgggcaaga agcccaaggc 180
 ggagaagaag gtgccggcgt ccaaggaggg cggcgacaag aaggggaaga agaaggccaa 240
 gaagagcgtg gagacgtaca agatctacat cttcaagggt ctcaagcagg tgcaccccca 300
 catcggcatc tctccaagg ccatgtccat catgaactcc ttcataacg acatcttcca 360
 gaagctcgcc ggcgagtcgg ccaagctcgc gaggtacaac aagaagccca ccatcacgtc 420
 ccgcgagatc agacctcgt ccgctt 446

<210> 541
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-C2

<400> 541
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 acagggaaga actcgggggaa ctcagtgga gaaggaaaat cgacctccag aagaggaagt 120
 cgagcgggaa taggctcatc aggtcaca ggactgccag gacgcgcacg aagatgagcc 180
 ctaaggcat ttgcctcaga gatgcggcga acctcctcgg tagcaatgtg agtagcagtg 240
 tagcggcagg tgtcaaagat ggctttatgg gacttcccaa taaagcgagc aaggcgggtca 300
 aatggcttga cgaaagggtt ggtgtggcaa gaagagctct caccacacga cggagcagga 360
 gccttgcccc tagaagtgtc atcacgcgga gtccacatgg attgaatgtt gttcttgttg 420
 atggggcaag tgaagataga atcaatgac 449

<210> 542
 <211> 387
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-C3

<400> 542
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tgatcttaga gtcattgctag cgggtacttg tggattgtag aagtacttgt gttgaagttc 180
 gtcattccccg tctcatgcac gtccggtgca gcgtcacgtt acgaagtcgg tacaatagtt 240
 aattattgat tgtcctgctc atcagagccc tgtatctact atttgaggac gaatctttgc 300
 gtgacacacc ccaaaaacca tacacgtaaa aaaaagcggc cgctctaaag gatccaagct 360
 tacttacgcg tgcattgcaac gtcaaaa 387

<210> 543
 <211> 450
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-013-Q1-E1-C4

<400> 543
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 agtgggtccg agcacagcgc caccgttgac gccgaccaac agtccccctt cacctgcgga 120
 catccggagg cggaacgcc gtccttttac gacggcggtc cttaccgcgc gctgttctgg 180
 tcgctgcccg agcttgacga ccaaggcca aaaaacgtct tgccgttacc atggtcgcgg 240
 ttggagatgt ggggcaggct gacggcgggc gcgctggatg ggacttgggc cgtaaacccc 300
 ccgattatac acgaacatgc gttacctgag tccgtgacgc tctccaccga cgtggtgatg 360
 ttctaccggc cggacncgga ggctggggga acgaatgtga tgattgctgc aaccgaggat 420
 gtggagcatg tgtatagcat ggaggaacat 450

<210> 544
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-C5

<400> 544
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 acgaggagtg gagagacgcc tacacggtgt tcgggtccgt ggtgccggag gacatggcca 180

tcgccgagga gatggcgatg ctccccacca gcacagacgt ctggagcggt gtgaccgtca 240
ggctgctgaa ggacccggtg tatatcaagg tgaagaggag aagcaacgtg accgcctact 300
gagctcgccg gcgattttgt tgttctcttt cttctttcac ttgagatgtc aaaagataag 360
aacacaaatt acatgtccaa aggaagaaag aaagaaaaat agaggaggtt tggc 414

<210> 545
<211> 450
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-013-Q1-E1-C6
<400> 545

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ctagaagctt ccagaaagct ccggcccgcc gccatggccg cgcccttctt ctccaccccc 120
ttccagccct acgtctacca gagccaacag ggatctgtga cggcgtttca gatatccggt 180
ggggatgtgc aggtcctgca ggtgatggtg aagtcgcagg acaagttgac tgcgaaacca 240
ggtacaatgt gttacatgtc cggaacatt cagatggaca acaattactt gcctgaaaac 300
gatggaggcg tgtggcagtg gatatttga aaaagcataa ccagcactgt tttcttcaat 360
cctggccctg atgatggata tgtggggatt tctgcgccat ttctgngag gatactgcct 420
atagatctag cgaactttgg tggagaacta 450

<210> 546
<211> 424
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-C7
<400> 546

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ataaaacttg tagatcactg aatatgatat gtttgattcc ttgcaatagt tttgcgatat 120
aaagatggtg atattagagt catgctagtg ggtagttgtg gattgtagaa atacttgtgt 180
tgaagttcgt gattcccgtg gcatgcacgt acggtgaacc gttatgtgat gaggtcggag 240
catgatttat ttattgattg tcttcttat gagtggcggt cggggacgag cgatggtcct 300

ttcctaccaa tctatcccc tagtagcatg cgcgtagtac tttgtttcga taactaatag 360
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 ctct 424

<210> 547
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-C8
 <400> 547

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 ccacccacct aacgcgcct tctacatgga cggccacttc gtcaacgaca gcgggctcta 180
 caggttcggc tagctcggcc aggcctcgtc tcttaccgtt accggtgacc ttggtcggcg 240
 ccaatggcgg cgaccgagtg ccttatgctg aagcacttgg ggaccgacga ccgaagctag 300
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 gggttttagc cgattgacgc caacatatgg acaaccgccc 460

<210> 548
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-C9
 <400> 548

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 cagcttaagc gtgaggcccc gatgaagggt gggttttatg tcagtcctga ggccaagctg 180
 ctgtttgttg tcagaatcag aggtatcaat gccatgcacc caaagaccaa gaagatcttg 240
 cagctgttgc gtttgaggca gatattcaat ggagtgttcc tgaagggtta caaggccacc 300
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gtgagggagt tgatctacaa gagaggttat ggcaagctca acaagcaaag gattcctctg 420
 accaacaaca a 431

<210> 549
 <211> 354
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-D1
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 tcaatgggta aatttcctag gtcgtgcgaa tgtttcggat gataccggag tgagtcaagt 180
 ataccgacta gcaagattgc tacagacggg tcggtccttg atatattcag gtttctaagt 240
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<210> 550
 <211> 465
 <212> DNA
 <213> Triticum aestivum
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 tgttaccgac tccaaatctg aaaggaagtc cggatcgtg cctgttctaa ctggcaaccg 360
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<210> 551
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D11

<400> 551

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 aggcaaagct tgtgatcctt gctaacaact gccctccact ccgcaagtct gagattgagt 180
 actatgctat gttggcgaag atcactgtcc accactacca tggaaacaat gttgatttgg 240
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 aatcaagttt gatgggacta tgggttttca ct 452

<210> 552
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D12

<400> 552

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 cccggatgag ggggtgggttc tatgtcagtc ctgaggcaaa gctgctgttt gtcgtccgta 180
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 gggttgagcc atatgttgct tacgggtacc ctaacctcaa gagtgtcagg gagctgatct 360
 acaagagagg ttacggaaag ctcaacaagc aaaggattcc tctgaccaac aac 413

<210> 553
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D2

<400> 553

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acaccgcctc gggggctgca acctctaagg agatagagcc gaacactgac cttgtccctc 180
atgaagcttg tgacttcgag gtaccggact ccgaatctcc cagccccct ccaatcgaat 240
ccgattgggt gccggtcatg gagttcaccg cagcggacat ctttcaacac tcaccttttg 300
gcgacatctt gagttcgcta aagtatctct cgttatcagg agaaccctgg ccggactgcg 360
ctcaggacgg ttgggatgcg gatgacgaag aaattcaaag accaaccacc aatccattcc 420
ccaccagcac cttccggcga accaccgcaa ctcccccg 458

<210> 554

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D4

<400> 554

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aacaagaggt ctttcaagta cgcttgggtg cttgacaagc tcaaggctga gcgtgagaga 180
ggtatcacca ttgatattgc tctgtggaag ttcgagacca ccaagtactc gtgcactgtc 240
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gattgtgctg tgcttatcat tgactccacc actggtggtt ttgaggctgg tatctccaag 360
gatggccaga cccgtgagca cgctctcctt gctttcactc ttggtgtgaa gcagatgatc 420
tgctgctgca acagaatgga tgccac 446

<210> 555

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D5

<400> 555

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cttgggatac gcccattggt tacaagagct ggtgctgtg tttgtgtggg tgaaagctac 180
ttgagtcgag tttaatgact tgaatgttga ttaagctgga gttgatccaa actctgttta 240
tggtgatacc tataacctat tcacatggag atctaaatac ttatgatgca tgctttacaa 300
agttgttagg acaigtcatc gcactcaaaa ctagctttat gcaaaattat ctacttagtg 360
ctatatcatg cattgttgta ccttggttca aaacatgggt tgcttgtagg tacattaaaa 420
ttact 425

<210> 556

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D6

<400> 556

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gtcagcgcgc agcagcctct cccgcgagat aaaccatggg tggggtagctt gggttgatac 180
agattgatca atcaacagta gccatcaagg agaccttcgg gaagtttgat gccatcctgc 240
aacctggatg ccaactgctt ccatggtgcc tagggcagca gattgctgga tatctttctc 300
tgctgtgca acagcttgat gtccgatgcg aaacaaaaac aaaggataat gtctttgtca 360
acgttgtagc atctgtgcag taccgtactc ttgctgacaa ggcactctgat gccttttaca 420
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<210> 557

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-D7

<400> 557

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cgccaactgc ggcaacatga aggaaactat cctactcatg atttgggaatt ggccgcagtg 120
gtgcacgctt tgaaaatctg gagacattat ctgattggaa agaagtggca aatattcacc 180
gagcataaaa gtctcaagta tatattcact cagcccgact tgaacctttg acagcgaaga 240
tggctcgagt tggtaagga ctacgacctc ggaataaatt atcacctagg caaagctaatt 300
gtggtggctg acgccctcag ccgcaaacca gccaacctta atgctctaatt ggattcctta 360
cctccggagc tttatgaaga aatcatgcag ctaaacttgg tgatcaccga cgcccgctt 420
aacaatat 428

<210> 558
<211> 463
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-D8
<400> 558

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cgaagttgta gttgctcttg gcagagatct cgtagtactg gaggttcttc ttctgtgga 180
aggtcaccat cttggcttct acctgccggg tcttcacgtc caccttggtg ccgcacagga 240
cgatcgggat gttctgcac accctgcaga tgtctctgtg ccagggtggg acgttcttgt 300
aggtgagtcg ggaggtgaca tcgaacatga tgattgcaca ctggccatgg atgtagtatt 360
cgtcacggag gccaccgaac ttctctgtc cgcccggtgc ccagcagtag aacctgatct 420
tgccgtggct cgtctggaaa ttcagcggcc gctctagaag atc 463

<210> 559
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-D9
<400> 559

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aattgctttc ccacttccac acatatgtcc taaacctaaa gtcaaactcg gccccactaa 120
 ttctttctat ctggcgccac cgagtttga tgtcttagcc actgccacaa accctaggca 180
 aatcagtctc accgataggg atctcgggtc caccgagatg ggattgtaat ctctctgtgt 240
 atgtccatta tcaaaatcgg tctcaccaag tttgagcaat cggtactacc gtgattacaa 300
 tgcaaactct ctggttaact tattatcaaa atcgggtcca ccgagtttga taatcgggtc 360
 aaccgagttt gcctgaccga cactctggtt agctaattac caaaatcggc cctaccgagt 420
 ttgtgtaatc ggtctcac 438

<210> 560
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E1
 <400> 560

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 cccttgaatg gcctcgactg aggcctctgg cttcagcaag atcgcttgg cactgtttca 120
 tggcagtcag aaaatagaga tgaacacatg cattaaatat cattcttacc taaaggaagg 180
 ttatggcgcc aatatggatg atgaggattg gaacacagat ctccctttgt gcagttccac 240
 caaaatgaac caactgttcc attctgacat tccagttaaa caacacaaaa gtcacttctt 300
 ttaagaagag ttttgtgcag tgcacaaaaa ggtcacaaca gcaggtgaat tggatatccc 360
 tgtttgaca aaaaggcaca aaggaaacag tcagagtctc aaacaattat aggcaaaaac 420
 a 421

<210> 561
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E11
 <400> 561

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 tgagtatccg gactcccga taacttcatg gtttttattt tttgccacac aatgtctttc 120

taatgccgca tacaaccctg cagtccgccc aacgacgac ttcccgttc attgagcggg 180
 tctttagggt catcgatat ggattctttt ccgaccgtct ccaccccccg tgacacggac 240
 gatgccgagg tgggatcccc ggaagggacc cgccaggagg aggaggcccc ggaggtgtcg 300
 caggacaacc tcccggactt tgcaccggac tcggttccgg atcccattgt ggctctggag 360
 tccggcgggc ggcccccttca taagaaaggc aagaccgtga cgccggcaag ctccgtccaa 420
 ctggaggggc cggat 435

<210> 562
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E12
 <400> 562

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 agctcaccat attcgactcc gaagcaaacg aggcctagga aatcaagcca ctccggggag 120
 cagcaacaac ctttcagtgg caatggggtt tgatattgcc ttccacgac atcccctgga 180
 ttagtagtga tttgagccag cggatgtgct ggtagcaaca catcattccg ccttggggtt 240
 gtcagtccgg tacccaatag atatatgtt tttctctagc cattgctatt ctttttagtg 300
 tgttgccccc aacgaaagca ttggcgtggt gccaaattt tgccatgtgc cctctgtac 360
 agtatatcac tgcccaatca tttctactta aatgaaacc ggtgatgggt atagattttt 420
 ttttgtaaa aacct 435

<210> 563
 <211> 348
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E5
 <400> 563

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 ctgctcgact gaacatctcc tgtcgcacgt cgaatgtaag tcaccgagct agtttcattt 120
 tgccttaagg atgaggtaat gcataactgg agttcagaca tgaattgaca cattgactca 180

gacacatcat ggtctatcat gacgactaca tactgagga acatgatcga acagaccaa 240
 ataaacaatc tgtgtgagaa agtataaact gtgtctctag aggatcgaac attaagatat 300
 atcacatgtg acttcaaaac tcttctgtaa agccacacac attcaatt 348

<210> 564
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E6
 <400> 564

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 tcgtcgttgc tggcccgga cttcagcaat gccagctcgt cgtgatcgcc gacacggcga 120
 gcaagcttgt gagagccctt gcatgctagt gagagctcga tcgagggctc cgcagtgcgc 180
 cgggacatct ctgctacggt tgccgcatgg cggcgggacc tctctagtgc ttctgcggcc 240
 ttggtctttt tccctgggtc acatgtccac ccgaaactcc tcctaccggt catggcggaa 300
 cgacttgaca tgaaagaccg ggttgtgggt gatgaggaga ggaactatga agtaattttt 360
 gagtgggtag tttttatagc ccggtgctaa gtgtgaacac atatttgtt gatcgggtgtg 420
 aacagatttg caattactta gtgca 445

<210> 565
 <211> 91
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E7
 <400> 565

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 gccggcactt ctgcagtgcg aggtcgatc g 91

<210> 566
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-E9

<400> 566

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atctggtaat cgcgatggct atacgaagag tagtgatgaa ggcaagatga tgtcggcttt 120

gtctctgggc aattcagaaa tggcatacac accgccaaaa cctgaccgca ctcatccctt 180

tgccatatca taccatgatg ctgataccta ctatggtggt gcagtggcag cctatggcgc 240

acatgctatt atgcaccccc agatggtggg catggtacca tcctctcgag tgccgctacc 300

gattgaacca gctgccgccg aagagcccat ttatgtgaat gcgaagcaat accatgccat 360

tctccgaagg agacagctcc gcgcaaaatt agaggctgaa aataagctgg tcaaaagccg 420

ta 422

<210> 567

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-F12

<400> 567

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aaccgacgag cgtccaaagt ccaaactctg gggaaggacg ataacacaca aactgcaact 120

ggcctctttc gagaaggtgc cttagccaaca gagaaccaga gcaccacacc tccaatcatc 180

ggctcctcgc cgatcatgca ggccgaaaga gtcgattgaa aactgacaa caagccccat 240

caaaaggacg ttctgtcgt cgccacctgg ggccgccacc tcgactttcg agcccccccc 300

cccccatg agtttccctg gccgaatcca catgtgaagc caccatgagt gtcgctgtct 360

ctaggacggt cagatttgag tcaacaaact ttcccacccc cggagctggg tgtgccatcc 420

acttcctaac aaaccgcaat gggaaaa 447

<210> 568

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-F6

<400> 568

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tattgtcctc acagaaccag gcctcagcgt gatcatcagt gctgtgctta ccagtcgtgc 180
aattttccag cgtatgaaga actacactat ctatgctgtc tccatcaciaa ttcgtattgt 240
gcttgatttt atgtacttg cctcatctg gaagttcgac tttccaccgt tcatggctct 300
gatcatagcg aatccaaatg atgggacat catgactata tcaaacgatc gggtaaaacc 360
atctccacta cccgacagct gggagctggg ctgagatttt c 401

<210> 569
<211> 380
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-F7
<400> 569

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atccatgtaa gaatatgggt cataattagg atgggtcttc aatgtattca aagggatgca 120
ttggagattt tcgatgttg tagaaagaca ttttcacgag aaatgtcacc gatataattat 180
ggaatagtct aggaagaacg gaagtgtgct aacttagggg ggattcatga cgagtgggtca 240
cagtctttga gtatctgcca aacaagccac tgaatcatgt atgaggaaga gaaaacatgt 300
gtgattatag aaagacgagt cagcgatgaa gcatattaca gcacgcgtca tatcaagtag 360
aacgtgcaga atcacctcac 380

<210> 570
<211> 455
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-013-Q1-E1-F8
<400> 570

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agcatcttct ccatgacttg actgagatgg gtatctggac acctgctctg aaaaataaga 120
taatttatga agatggttct attcagaaga tggaagaaat cctgatgat cttaaagcaa 180

tttacaagac tgtttgggaa attaagcaga aaactctggt tgacatggct gttgatcgtg 240
 gatgctacat cgaccagagc cagagcctta atgtccacat ggatcaacca aactttgcaa 300
 agctaacttc gttgcatttc catgcttggg ccaagggcct gaaaactggg atgtactatt 360
 tgagaacaag ggcagctgct gatgcaatca agtttactgt ggacactggc tttctgaagg 420
 tcaatgggga tgctaattggg actaatggca ctaat 455

<210> 571
 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-G1

<400> 571

ccggtctaga atttacgggt cgacggggga gtgcgactgg agccacgata atcgaggtct 60
 gtgcgacatg cctcacctgg atgatgattg gtgcttcagc attaagcacg aggagacctt 120
 cgaagttgaa acggtacaca acaacgacaa gtgttatttt cataattaag catgacttaa 180
 actctttcaa cgtgtaattt tcacttttta caattcgagt atagcttatt ccatgccatg 240
 caagatgcta tgtcttggag aggatggatt ttgaagacca tgaaatttct gaaacaaaga 300
 aaattcacct aaggactcat catgatgtgg actttgaagt aaatctatat aattctgaga 360
 gcacaacca tttggttgca aaaattggga agcattttgc aagatgtatg gttttgatga 420
 gggtatgctt atcaccat 438

<210> 572
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-013-Q1-E1-G2

<400> 572

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 tttagttttc cacaatcatc ctcgctgtac acaccttttg ggagaagccc acttgattag 120
 aatttattag aattctctat gtgcttcact tatatctttt gagctagata gtttttgctc 180
 tatgcttcac ttatatcttt cagagcacgg cggtggctta atttttaga aattgctagt 240

ctctcatgct tcacttatat ttttttgaga gtcttaaaca gcatggtaat ttgaatgaaa 300
 actatcatag gaggtgaatt ggatgccatg atcaatttga tacttgataa ttgttttgag 360
 atatggaggt agtgatatta aagtcatgct agttgggtga ttatgaa 407

<210> 573
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-G5
 <400> 573

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 tacacgaatt gcttaggaat tcctaatttg atatgaattt tggagttcca aaagtatacg 120
 ttcaatacag attactacag actgttctgt ttttgacaga ttctgttttc tatgtgttgt 180
 ttgcttattt tgatgaatct atgagtagta tcggagggtg tgcacatag ataagttgga 240
 atatagtaga tattacaccc atatgagctt agaatgagtt tattatagta cctaagtggt 300
 ggttttactt tattatacta acggagccta cgagttttct gttgagtttt gtgttggtgga 360
 gttttcaagt tttgggtgaa ttcttttgat ggattatgga acaaggagtg gcaagagcct 420
 aatcttgggg atgcccatgg caccaccaag ataatccaag 460

<210> 574
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-G7
 <400> 574

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 tatctcttta catgttctat aatacaatat ccgcataacc aaacacattt atcacatggt 180
 tgcaagctac ttaggatggt gtattaccga gagggcccag agatatctct tcgtcacatg 240
 aagtgaaaaa tccaatctt tatccatgca acccaactaa taccttctga gatgcttgaa 300
 gagtaccatt atgatcacac agttatgaaa ttttggttga taccacaaa gcattcttcc 360

ggtttttagag agtgtcatga tctcatagtc taaggaatat atacttgaca ttaagaatat 420
 gtagcacata aactaagtga tacgatcata tg 452

<210> 575
 <211> 281
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-G8
 <400> 575

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 accagtgtag catccttctt tgtcagccga gttgacagtc tgatcgacag aatgcttgac 120
 aagattggta caccggaagc tcttgccctg aggggaaagg ctgccgtagc acaatcaaag 180
 atagcaaadc agctttacct gaaaaaattc tctggcccga cgtcgcatgc tttggtgatg 240
 aaagtaccaa tcagcataag ttgttggtgg catccaccat c 281

<210> 576
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-H1
 <400> 576

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 acttccttta ccattggata acagggtact cttctccaat attttattcg cattctaaaa 180
 gagaaacaaa caaatgcac tcagggttac aatgtagtat atgaaactca ttttggtaaa 240
 ccagttaagt agtaagggtg acaggataac agcatgaaac aaacatatat ctatgtagta 300
 tggtcactgt atgggtctata tcattctagt ttatgttgcc aaatcaagat agatacagtt 360
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 agcaataaca acacttgtaa tgtgcat 447

<210> 577
 <211> 159

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-H11
 <400> 577
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 aaaaaaaaaa aaaagcggac gctcatagag gatcaaaagc ttacgtacgc atgcatgtga 120
 agtacatggc tcttctaaag tgtcacctaa gattcaatt 159

<210> 578
 <211> 457
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-H3
 <400> 578
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 agtcggagca tgattttattg attgattgtc ctccttatga gtggcggtcg gggacaaacg 180
 gtggtctttt cctaccaatt tatcccccta ggagcatgcy cgtaatactt tgtttcgata 240
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 gtatcagaca cccaccatat accttcctca aaacagccac catacctacc tagtatggca 420
 tttccatagc cattctgaga tatattgccca tgcaact 457

<210> 579
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-013-Q1-E1-H7
 <400> 579
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 aatcaacggt gccccggtgt ttgaaattca ttcccatttc ttgcatggga cctaagcatg 180

cacccaagga cacagatttg attttcaacc aatttatatg cactgaagca tgtgcatgta 240
gttcaagttt gaattatgca cataaaatgc attgaaaact cagttaatgc ataaaaatgt 300
ccaaacgaac cccgaaaaat cacaaagatt cacacaacac tcccgttggt ctatgttgac 360
tcgagaaaaa aaattgaaaa caatgagagg caatggatat aatttcgtcc ccaaagctgg 420
gatgttcctt accgaaaacc atcatg 446

<210> 580
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-A1

<400> 580

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atgcgtagct cgcattcgtg acgcagtcag tgcggttacc atatgcacct ccggacttag 180
acttgcgagt tctttttctt ttttgtgtgt ttcgaagcag ttgtctgcat atcttctgtg 240
ttttcggaac tttggtgact gactgactgt cgtgttacat tgtcgttgaa ctcgaagttg 300
atgttctagt gaactaagtg aagtatgtat gggcggatgg tggaaatcaa aaaaaaaga 360
agaaaggaga aaaaaaagc gggcgctcta gaggatccaa gctt 404

<210> 581
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-A10

<400> 581

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ttcttaccta ttgtccaaga aaaagccaca aaacaaaagt tagatctatt catactttgt 180
cctagccaga ctgggccttt gcaatttttc ttttcattgt ttgtattatt gaattatcgg 240
ttgcatcgcc gtgtcgagtt gctggcttta gtgtctagtt ccttttagagt ttcgagttct 300

gttcacatta gtcacgcgcg tgctgcatca ttatcccatc cgtgtgccac catcccatcc 360
 accaattttc accacgtgct acgcgctggt c 391

<210> 582
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-A12
 <400> 582

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 ccacctccgt ggctcccgcg actacaagac cgccatggcc gtcgagatag attggccggc 180
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 cgcaactacc tttgtgcgac cggaacaaaa acctcaacat ctatttctgt actccctccc 360
 ggaacgtttt ttttgtttta aaagaagacc cgttgccaaa aaaaaacaaa agtttaagaa 420
 ataaaa 426

<210> 583
 <211> 330
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-A5
 <400> 583

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 tacgacagac agcgatgttc acagtgatga tgcagtcta agggccgact atacgattcc 180
 tccgacatgc gtagccgac gacttcatgg tatccccgcg gatgctactc ttgtggcgaa 240
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 gctcgatcag ttacctcctt atgctatcag 330

<210> 584
 <211> 391
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-A6

<400> 584

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 aataatatgc caattttctt gggttatgaa tttagtcctc atgtgataag gtattcaaga 180
 gggatataat aaaaaattca tgaagtattg aatatatgag aagtttgatt ccttacattt 240
 gttttgagat ataaagatgg tgatattaga gtcctgccag tgagtaattg tggtttagta 300
 agaatatttg tgtaaggtt tatgattccc gaagcatgca cgtatggctt ctcgttatgc 360
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<223> Clone ID: LIB103-014-Q1-E1-A7

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 attgaccca tgaagctgct gccctctca cgcttctgc cgcagccaaa gggcttgact 180
 ccaagaggtg gtggctgagg tggaagaggt ggtggctcgtg gtggatttgg tggccgtggg 240
 ggattccgtg gaagaggtgc accaaggggt cgtggacctc ccaggggtgg agggcgtggg 300
 ttcagaggac gaggcagatt ctaggatgta gttttaagtt tgctgtttgt tgaaacatga 360
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 tgtggaaatt gaattccttg cg 442

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<223> Clone ID: LIB103-014-Q1-E1-A8

<400> 586

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agtgtcagac gtcgggttta atccctgttt gcattggggg accactgccc tattaatcat 180
ccaatcagat gttggttgtc atgattaagg cgaaactacc gattgaagta accttcctta 240
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ttcttctatt cctcggcgat cgcttcctta ccccatcggt ctgcactgat ggatgttttg 360
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<210> 587

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-A9

<400> 587

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gttagtttca gagagagatt gtgtgggtgt gaagtgtact gaagattgag gttcatcctc 180
tgactaactt agtcacagat gctaaccctaa cagtaaatga ccaacgaacc ttcgaatgag 240
taggataagg aagattagtc ggaggattca ataacggaat tagagaaaac agagcagcag 300
ctcaataata acacctaagc tttagaatca aactgcatg ttggaaaacg gaggataaga 360
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<210> 588

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-B10

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ctacggatca cgtggacgcc ccatgatacg cgacgacagc cgtcgcgccg gacacagtaa 180
gtctggggcgg gccgaacaaa acagacaaaag ctcttttgag ctccgtcgtg atatcgccca 240
gtacagaggc gccgcacgcc cactatgctt cacagatgaa gtaatggatc atcaaatccc 300
cgaagggttt aaacctgtca atattgaatc ttatgatggc acaacagacc ccgcggtttg 360
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<211> 264
<212> DNA
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<223> Clone ID: LIB103-014-Q1-E1-B12
<400> 589

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aatgaaataa acgaaataac gctcttgctt aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa acaaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaagggggccg cccaaaagga tcaaagctaa ggtacgcgtg aatgcaagggt caaacccctt 240
caaaagggtc accaaaatta aatt 264

<210> 590
<211> 311
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-014-Q1-E1-B2
<400> 590

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atcgactcag gatcacaagg gttgtgcgtg cttagaggga ttgtctgcct aaaagttgga 180
ctaggggtcag gccatcaaac aagaactaat tccatgacgt caaatcgggc gatctatagg 240
atcaaacctt acgtaccgt gcatgccacg taaaatctct tctacactgt cagcgaacat 300
cagttcaatg a 311

<210> 591
 <211> 419
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-014-Q1-E1-B5

 <400> 591

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 cacgggagcag gataaggaac ccgttgctgc ttgtgatgtt gagaaacctg cagatgcagc 180
 tgaaaacaat gacaacaatg atgcagaaga gttgcaagac cagactcctt ctgcctagtt 240
 gacctactgg gctgacctga tgagaacata agatgcgaat ggcaagactc taatttgtgg 300
 tgtctagtac gagcatcaaa gatggcagcc agaggaggag ctctggatct gcgtaagggtg 360
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 <212> DNA
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 <223> Clone ID: LIB103-014-Q1-E1-B6

 <400> 592

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 gaattcgat ttaatgaaga ttttagtgct cccctttatc gcataaaggt gaatgcaatt 180
 cagatgaagg aaacagtaga agaaaacaca agcaccactg agagagtatt tcaagatcgt 240
 cagtatcagg ttgatgcagc catagtctga attatgaaga cgaggaaaac tctcagccac 300
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 aagaagagaa tagagagcct aatcgacagg gagtacctgg agag 404

<210> 593
 <211> 75
 <212> DNA
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<223> Clone ID: LIB103-014-Q1-E1-B9

<400> 593

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cacctagatt cagtt 75

<210> 594

<211> 417

<212> DNA

<213> Triticum aestivum

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<400> 594

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aaagttgctc ttttaattgat tgtatttcct tgttgcaatc cgtgctaaat tctccacatg 120

cttatagtca acataaagcc ttcaccgaac atattgttga tgccttgatg caatcttatg 180

aagaaaaact tgagttgaaa gtttctatcc ctagaaaact ctatgatgag tgggaaccaa 240

ctattaaaat taaaattaaa gatcatgagt tttatgcttt gtgtgatttg ggtgctagt 300

tctctactat tccaagact ttgtgtgatt tgctagattt tctgaatttt gatgattgct 360

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<210> 595

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-C12

<400> 595

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gcgccaagcg ccaccggaag gtcctccgcy acaacatcca gggcatcacc aagccggcga 120

ttcgctgtct ggctcgcagg ggcggcgtga agcgcattctc ggggctcatc tacgaagaga 180

cccgcggcgt gctcaagatc ttctcgcaga acgtcatccg tgacgccgctc acctacaccg 240

agcacgcccg ccgcaagacc gtcacggcca tggacgtcgt ctacgccctc aagcgccagg 300

gacgcgccct ctacggattc ggaggctagg cgaattcagc tgcaccact tgatcagata 360

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396

<210> 596

<211> 333

<212> DNA

<213> Triticum aestivum

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<400> 596

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ggcccaaaga ttggcgggtgg cggcgggaag cgttgaaagt tgattacgcc atagacatag 120

agttgtgctg cctagccttg ttctctatcc tactatcata gacctttgtc aagttattac 180

cccgccctct tgaatttgca ccttatctct gaggctgaat ggtgttaacg ttttggagtg 240

tcttgatgag tttatttata atgaatggtt cttatgttgg ctcttatcaa gacaaacacc 300

agggacgcgc cctctacgga ttcggaggct agg 333

<210> 597

<211> 411

<212> DNA

<213> Triticum aestivum

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<400> 597

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gtatcaactc cccaagctt aaacctttgc ttctcttcaa gcaatttagt tgataaactg 180

aaagtataa agaaaaattt tacaaactct gtttgctctt gttgttgtaa atatgtaaag 240

ccaacattca ggttttcagc aaagattatg aactaaccat attcacaata acatttaggt 300

ctcatgttta ctcatatcaa tggcataatc agcaagcgag caataataac aaatctcgga 360

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<210> 598

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-C7

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acaagtccat gtgctacagc ctccatgtcc atgtcctccc tttcttcagg ttctacaggg 180
gagcccaggg cagggtcagc agcttcagct gcacaaatgc aaccatcaag aagttcaagg 240
acgccctcgc aaagcactcg ccggacaggt gcagcctcgg cccgggcgcg gggctcgagg 300
aggcggagct cttggctctg gcggcaaaca gggacctgga attcacctac aacgagaagc 360
cgacgctggt gccga 375

<210> 599

<211> 360

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-C8

<400> 599

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acttggtagc tcttgacttg gcatagatct cctcggcaac gacgccagaa attcttcccg 180
ctacttcttg agcttgcggt gggttttccc ttgaagagga aagggtgatg caacaaagta 240
aagataagat tttccatcag ttgagaacc aaggtatcaa tccagtagga gacaacgcat 300
agatcaccga gtacacacgt aagcagacaa acttgcacca aacgcgatag aggggttggtc 360

<210> 600

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-D11

<400> 600

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atttgcttta ttgtactaat ggatcttatac gagttttctg ttgaagtttt gtgtggatga 180
 agtgtctaaa cgaggaggtc tcgatatgag gaaaaggaag agaggcaaga gctcaagctt 240
 ggggattccc aaggcacccc aagtaaatat tcaaggagac tcaagcgtct aagcttgggg 300
 atgccccgga aggcaccccc tctttcttca acaagtatcg gtatgttttc gtattcgctt 360
 cgtttatgca ttatgtgcaa gtcttggagc gtcttttgca tttagttttc atttttattt 420
 tatgaaccat gc 432

<210> 601
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-D12
 <400> 601

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 gccctcgctt tcccgtagaga gatctttcga ggtctctgcc aggcggtgag ccctctcatt 240
 tttttccgca tcttgggttg ctgctccctt gttacgagta gttctcgacc tagagctctg 300
 cacaccgtcc atggctagtt ccccttttta taacctagta ctagcaccag tactaaaacc 360
 tgcatagtgg gaacacattc agatttgata cgtactaggt gt 402

<210> 602
 <211> 375
 <212> DNA
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 <223> Clone ID: LIB103-014-Q1-E1-D4
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 cagctcttgt gatctccggc atcacgggga ggattaacag ggccgtgtgg gggccccgga 180
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gaaagctgct gaaggagtca gacaaggagg ttggacatca gaaggcaatt agctcactgt 300
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<210> 603
 <211> 312
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-D5
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 ggggcaacgc acaccgctaa aaacatgatt acattgatta accttgtgtc tccaatgggt 180
 gccccctgcc cccgtttatc aatgaataat agacgggatg ggccggccct ccccaaagcc 240
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 agagtccttc ca 312

<210> 604
 <211> 360
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-D7
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 gcgcggtcgg aggcaggaag gccgggctgc tggagtggga agaagggggg atttgcgtgg 240
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<210> 605
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<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-D8

<400> 605

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cgatgttgct gagtttgtct acacaaataa gccttcagtt gatcagctga taaagtttgt 180
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ccctggagaa ccctttgcag caaagccctc aaaggatgct gagatggaga agataatgag 300
atcaatggag ggcattgccag gagccccaaa catgaagatg tactccagag acgatctgat 360
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<210> 606
<211> 436
<212> DNA
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<223> Clone ID: LIB103-014-Q1-E1-E10

<400> 606

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tgaaattgag atcttgaatg cctttcagct gcttactgct aagccagttg ttttaattggt 420
gaacatgaat gaaaaa 436

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<211> 107
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-E11

<400> 607

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<210> 608

<211> 376

<212> DNA

<213> Triticum aestivum

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<400> 608

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gagactctgg ttgctgtccā aaggcagcaa acagagaatc atagtaccag gtgatgatca 240
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<210> 609

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-E6

<400> 609

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aagttttggt tgatggatgg ttccatacag gggacattgg cgagtggcaa cctgatggaa 180
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438

<210> 610

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-E7

<400> 610

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<210> 611

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-E9

<400> 611

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ctgcagcatt ctgctatctg tgagttatgt aggatctatt tgtcaccatg gtggatattc 360
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<210> 612

<211> 397

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-014-Q1-E1-F10
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<210> 613
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 <212> DNA
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 <223> Clone ID: LIB103-014-Q1-E1-F11
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 ctgaactatc acagaacgca ctgcttaatg cttctcaact gatcttttat caggccattt 180
 gcacacacat ggatcgtgtg catctgtaaa ggatgagacc ttaaaaggca agacacaaat 240
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<210> 614
 <211> 400
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 <223> Clone ID: LIB103-014-Q1-E1-F5
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 ccgacgggac cctgcaagtg aggcgcggcg gagagagaga gactcgggtg gagacgacac 120
 ctcgcgcggg gaataaaaaga ttagtgaaga aagcaggggc ttttctgaaa tttttgtaaa 180
 tctcggtttt atctactcct ttctgtcaa accctcgccg tcgcagcatc agcaatagta 240
 ctactactac tactagtgcc atttccgccc ccgctctttc tgccatttcc tttttcctcc 300
 cgtaaaccct cgcttttag ctaaaaactt aaatgttcaa gcagaataga cggggtaaag 360
 tgagtaggaa gcaagcggcc gctctagagg atccaagctt 400

<210> 615
 <211> 380
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-F6
 <400> 615

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 gaggtgtcaa ctttaattac tagcagaatc cagtgggaacc tgcggacacg atacatgcac 120
 agtacgtcat gcataactca tcgattagcc ggccacatac catgcatgga gtaaacaaaa 180
 gagaatgtgc tcaagacaga aacactcacc caaaatggta aggaaataga atatcacttt 240
 tgagttcctg ctttgtaaga aactgccaca ggtctgcctc catgtcggcg ggggtgatgct 300
 ccaacacata tccattaacg atgtgtgggt caatgaaccc aacatcatgg atgttcctta 360
 ctctgcattc cttaatcttc 380

<210> 616
 <211> 385
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-F8
 <400> 616

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 cgcaatgggt gcgcaacctc cctcattccc tagatcgacc atacctccta aggttggtgaa 120
 accatatact agagcacgag gctctgatac caattgaaag gatcgatata gtcgaataga 180

gggggtgaat atgagactac aaattttaat ctttcttgtc aattttaaga tttagcggat 240
 aaataggatt cactagatat gcaacttggt gaacacaacc tacatgacaa gcaagcttaa 300
 agcaaagtat gctgggtaac aatctaatta gcgagccaac aagcacacaa ggcaaagtaa 360
 agtgcgggaa aggattaacc acaag 385

<210> 617
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-F9
 <400> 617

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 caccattata aataaagaat gagttcatta cagtaccttt tgtggtgggt tttctttctt 120
 gcactaacgg agcttatgag atttctgtt gagttttgtg ttgtgaagtt ttcaagtttt 180
 gggtaaagat ttgatggact aaggaatgag gagtggaaaa agcctaagct tggggatgac 240
 catggcaccc caagatatcc aagaataaac aaaaacctaa gcttggggat gccccggaag 300
 gcatccccctc tttcgtcttc gtctatcggt aactttactt ggagctatat ttttatttac 360
 cacatgatat gtgtttttct tggagtgtat tgtatgatat tagtctttgc tttctagatt 420
 tacacaatca a 431

<210> 618
 <211> 456
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-014-Q1-E1-G10
 <400> 618

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 attgcagcta atatgtgagc aaaggtgtc accaatcaaa gtccgtgtcc ttatgtaaac 120
 agatccttgt aaatgtgtga acaaactgat gagaggtaaa aaggaacggt gtcttaaaaa 180
 attggaaacc aagttcttag cccattccc ctttatctgg tttttacctt gcttctgcta 240
 ataaaaagat tggtttcacg taaacaattc aaatgcacac tctgatcttt tcctaaacca 300

tctcgtaatg gcaaaagaat tgcattcaga gaaatcgcat ttacctcagc acagcaccct 360
gctcaaatag tcatctccat caatgtagac caaccatcgt gcaaggcacc tataatttac 420
cttttttttt ttgaaaactt tacggggggg gaaaaa 456

<210> 619
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-G12

<400> 619

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ttttatggac tatggaataa aggggtggcaa gaggctaagc ttggggatgc ccatggcacc 120
ccaagatatt caagaatagc caaaatgcta agcttgggga tgccccagga aggcattccc 180
tctttcgtct tcgttcattg gtaactttac ttggagctat atttttattc gctacatgat 240
atgtgttttg cttggagcgt cgtgtattat attaattctt gctttttagt ttaccacaat 300
catccttgct gaacacacct tttgggagaa gcctatttga ttagaatttg ctagaatact 360
ctatgtgctt cacttatatc ttttgagctt gatagttttt gctccagtgc ttca 414

<210> 620
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-G5

<400> 620

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tgcatgggac ctaagcatga aaccaaggac acatacctga tttttcaata agttttatatg 120
cactggagca tgtgcatgta gttcaaattt gaattatgca cataaaatgc ctggaaaacc 180
cagttaatgt atgaaaattt acaaacgaac cctgaataat tccaattttt ttgacgacac 240
acctatagtt gcatgttcac ttcagataaa agttctaaca attcaaacac catcctttgt 300
agcagtgacc ccattacgta attcaaata tcaagacgat aaatcaatta gatcacagcc 360
agtttattat caccaaccac gtgagatgca gcacaaaata tcttggagca ccgtccgggt 420

atagtacgcc caag

434

<210> 621
<211> 342
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-014-Q1-E1-G6

<400> 621

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atgttgagca gcagaatgcc caaggcgcat atagtcttac agaagaggtg aaggaggaag 120
taaagtgcac caaggccatt atagagaggc tgatacagag ggaaggccat cttgtagtca 180
tagatgaagg aacagcggca gcagaaggtg ctacggcaag ggcatcggag cacagaatcc 240
tggctgttaa cccaaactac gtcattgatt gattaaccag ctgaggtcac acagctaact 300
agatccatca tatgtggttg accaatatag cagacattca aa 342

<210> 622
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-G8

<400> 622

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ggccggcggc gaggggaaga cgaggggcag gaagaagggc agcaaggcca agaagggcgt 120
ggagacgtac aagatctaca tcttcaaggt gctcaagcag gtgcaccccg acatcggcat 180
ctcctccaag gccatgtcca tcatgaactc cttcatcaac gacatcttcg agaagctcgc 240
cggggagtcc gccaaagctcg cccgctacaa caagaagccc accatcacgt cccgggagat 300
ccagacctcc gtccgcctcg tctcccccg cgagctcgcc aagcacgccg tctctgaggg 360
caccaaggcc gtcaccaagt tcacctcatc c 391

<210> 623
<211> 406
<212> DNA

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<400> 625

ttcccggggc gacgggcggg aaagggctga acgcgacggg cgagtttttc cggcgccgtg 60

acgagtggag gaggcacccc atggtgggga accagctgcg ccacgccact ccggggctag 120

gcatcgccat cgtcgctttt ggtatctacc ttgtcggcga ggccgcctac aaccgcctct 180

accgccgcgc cggcgacaac caccactaga tctccccag aggtgaagta gatggagcaa 240

accaatgttg atcttttccg gtttgatctc ataaggtctg catgaccacc ttgtaattcg 300

cgatcaggat gtgtgctgtt ggtccaacta gtgttcttgg aacgcgtgtc ctttaaactct 360

gatactccct ccgtccgcaa a 381

<210> 626

<211> 374

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-H7

<400> 626

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ttgcgcagtt cgctgagcgg aatccggacg tgctgttctt gcaagtcaac tacgagaagc 120

acaagtccat gtgctacagc ctccatgtcc atgtcctccc tttcttcagg ttctacaggg 180

gagctcaggg cagggtcagc agcttcagct gcaccaatgc aaccatcaag aagttcaagg 240

acgccctcgc aaagcactcg ccggacaggt gcagcctcgg cccggcacgg gggctcgagg 300

aggcggagct cttggctctg gctgcaaaca gggacctgga attcacctac aacgaggagc 360

cgacgctggg gccg 374

<210> 627

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-014-Q1-E1-H9

<400> 627

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gagagggagc agtaagagtg attagctagt gttagtggta atgactctga tgatttttat 120

tagctactgt tgctggtgat tagatagcta caacagctag tgttggtggt gattagctag 180
 ctagaatgag tttgaagatg atgatgtgct acactatgac tatgatgatt aaataactac 240
 tgttgatggt atgactatga tgatgattaa atagcttggt ctggcggatt agattcaagt 300
 ggaggcaaca tgtggtgcac attgaaagta ctactaatcc aaacaagatc aagtttggtt 360
 tagtagtata cttttgacat gcaccacata ttgcctccat ttgaacctaa tcc 413

<210> 628
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-A1
 <400> 628

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 agtctatagc tcaccacgtg gctattcctg tcgaacgccc caataaccgt aagatatgta 120
 tccgacagtg ccacttattg cacgtacaca ttagtagaaa aagaactacc atggcatatg 180
 ctacaccacg gccgagaaca cgtgcccaca ttacgccatc tgagaatagt gtcgcacttc 240
 gaaaatagaa ctgtcaataa attttgagct tgtgtgtcgt cacattccaa attacactac 300
 taccacgcta tatttaattg caaacctgtt cacaccaatc acaacataaa cggtttccaa 360
 cttaggagca tattagtact cggttataag tactactatg ccaagatgac tgcacattcc 420
 tcctcaactc ctcattccaca aaaacaaa 448

<210> 629
 <211> 374
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-A11
 <400> 629

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 caagcccaga cgagctgata attgacttgt ataataattt tgcaatagac ggggaagcttg 120
 tggtaaacta tgctttatcg gcagcgtggg gttaaagat tggatttgcg ggaagaatcg 180
 aatggatcga aaacgccgtt tgaaatttga ccgttttact gtgtatagct ggagttgtag 240

ttggtcagtc aaagaggcac tagctctcac atatgttgat gatgaaagta aaggttcttg 300
cgagactgcc ttttctggca ttgaactgtc caagtgttct ctctctctac agtatgttta 360
ttggttcttg attc 374

<210> 630
<211> 426
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-015-Q1-E1-A12
<400> 630

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gaccgacaag cagcagaacc tggttgaggc tggcgtcatt gaccagcga aggtgacgag 120
gtgcgccttg cagaacgcag cgtcgggtggc cggaatggtc ctgaccaccc aggcgatcgt 180
cgtggagaag ccgagcaaga aggctccgc gcccgccggg atgccccagg gcatgatgta 240
gaagcgcaat gatatgtagc aacctggggg catgcaattt taggggcgtg tggatgatcgt 300
tttgccaggg gagagaaccg tggcacctta aggaggaaat catggtgtgt aatggataat 360
gatggcctgt tctattgtct gtttggcacg cttcgttgcg attgccatgt tgaaaactaa 420
tttggg 426

<210> 631
<211> 456
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-015-Q1-E1-A2
<400> 631

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ggttcccggt ccgacctcg ccagcccatg aagatcgga acgccttagc gctcgtgat 120
cgccgtcatc tatatatctc ccccttttgc cagcagtgtg tcgtaggcag tgggccattg 180
tagatcagct atgtttgttc agcctgtagt agcaacctgt caggggcctt tgtcagctgg 240
agattggcta gctagacaga cttgcctggg acccacctgc ctgccctggc acattcgccg 300
tgttcccgcg tcacattttt cgcgggtgga tatgctagaa atgatatgac attcgccgtg 360

ttcccgcgtc acatttttcg cgggtggata tgctggaaat ggtatgcata aactgaaaaa 420
aaccgtagga agaaagaaaa aaaaagcggc cgctct 456

<210> 632
<211> 387
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-A7

<400> 632

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cctgatgaag caccgacttg tttagttcgc tatttctct gtatgttgaa ctcaatcgtg 120
gaacaaagtt attcgcatat agtggttgag aaattcatgg acagcaacaa agtcagaaaa 180
aaagagaaca ataaaagaag aataaagaac cagaaaaaag tcacgaacaa cagaaaccgt 240
gtatcaagaa tgaagtaaaa gtggcaccct caaaaggatc aatctgtagt tatcgttgaa 300
ggtaatttta aactttctca aaactgaaac tagaatccag acttaggcct ttaggtataa 360
aacgtggaac atggaaaaac ctagggg 387

<210> 633
<211> 453
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-015-Q1-E1-A8

<400> 633

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ggttggcatg gcctactttc ctgaagatat tctaaatatt tctacatttg gataaaagg 120
gctacatgca ccatatacgt caaaggagat tttccccct cttctttcta tattaggcaa 180
attaatgatg tattgttctt ttgattactc tcatatttcc atgacatcat gtttacccta 240
tctatttaat tatagatttt agtccttcaa tttcaattgt tgtacagttc tttcaatttg 300
agcccatatt tgcagtgtac agtatttcc ttaacaatcc ttccattttc tgctgcgcat 360
cncttgctat gcaacaaatt atgtagtgca caatttttct ctttacatag atgaaggctg 420
cacggatgac atactgcaca caaacatgg att 453

<210> 634
 <211> 443
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-015-Q1-E1-B5

 <400> 634

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 tcatgacctg cttttgcgcg ggagaagaca gctggctagc tcgcagcaac aacttatcaa 180
 agaaccctgg taattcggat accaaggaca aaagtggcag gacacgtcag aataagcaaa 240
 aacgtcgtgt taacagcgac aacaatgaag acacggcagt caatgccgga ttcaaaggct 300
 ataaatctgg tcagcggaaa aagccattca aaaagaatac tcagggccccg tccagtttgg 360
 accgaatact cgatcgcttg tgccagatac atggcacccc cgaaaggcca accaatcaca 420
 ctaacaggga ttgttgggtg ttc 443

<210> 635
 <211> 446
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-015-Q1-E1-B6

 <400> 635

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 gcaaccgcac gctaacatat ttatgcatgg ctactatttg caatagaggc acacgagaag 120
 gctgtgatta tttatggcga tgcaagatta cacaattaca gggcgtggac atactgaggc 180
 tcggtaacac tcgagtgact tactctacct cgtttatatc taagcgggcg tgccttgtgg 240
 acgtcgaggc ttctccacgg gtttcaccgt cgaggtttagc tggatggggg tgaggagctg 300
 cagggtcggg gtagcgatga tgaccatcgc gggggttgtt gaccacaatc ccgttggagc 360
 gtgttcccaa aaggcgacaa agcacttctg gggacaccaa agtattttgg ttgatggctg 420
 gggtagacct caaggactcg attggt 446

<210> 636
 <211> 426
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-015-Q1-E1-B7

 <400> 636

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 aaactatcat aggaagtga ttggatgcta tgatcaattt gatacttgat aattgttttg 120
 agatatggag gtagtgatat taaagtcata ctagttgggt gattatgaat ttaaagaatg 180
 cttgtgttga agtttagcaag tcccgtagca tgcatagtat gttaaagttg tgtaacaaat 240
 ttgaaacatg aagtgtacct agcttgtgca tccttatgag tggcgggtcgg ggacgaacga 300
 tggctctttc ctaccaatct atccccctag gagcatgcgc gtagtgcttg gtttttgatg 360
 acttctaaat ttttgcaata agtatatgag ttcttttgac caattttgag tccatggatt 420
 atacgc 426

<210> 637
 <211> 432
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-015-Q1-E1-B8

 <400> 637

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 aatggaaaat cggcaacgtc aaacgtgacc ctctcagtcc tgaagttcag ctactgcca 180
 aacgttaccg gcaacgtgat ctttcccttt ggcttgctcc tcccgggtt gattccttga 240
 aatgtgccgg tctcttcgag ctgcgcgtca gggatctgga gtttccggag caccgcggag 300
 gagatcaggt tcaagccggc cccgccgtca actagcatct tagtgacctt gaggttgccg 360
 attgttggtg aaaccagcat cggcaagcac ccgaccgcag ttatgcgatc aggatgggtcc 420
 tcaatgtcga ag 432

<210> 638

<211> 417
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-015-Q1-E1-B9

 <400> 638

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 caaatattat gaactaacca tactaacaat aacacaaagg tctcagaatt actcatatca 120
 ataacataat cagctagcga gccataataa taaaattcag atgacaacac tttctcaaaa 180
 taatcataac atgatataac aaaatgggtat ctcgctagcc ctttctaaga cgcgaaaaca 240
 taaatgcaga gcacctttaa agatcaagga ctgactaaac attgtaattc atggtaaaag 300
 agatccagtc aagtcatacc aatataaacc aataataatg aatgcaaagc atagtgtgct 360
 ctccagcggg tgctttttta taagaagggt tatgactcaa cataaaaagta aatagat 417

<210> 639
 <211> 433
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-015-Q1-E1-C10

 <400> 639

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 atattgtcat ggatcctcta acatgtgggtg ctaataatct ttagctagcc aaaaatcgta 180
 ctgagttgag atactacttg tgtatccaaa acccttgaac ccaatttctt gccctgagag 240
 tccacagtat ctacctatgg attgaatgag atcctcgaag taatttgtca tcggtgcaaa 300
 aagcaataca aatttctcct aaatatatat gatcttttat tataaggaaa aataagcttt 360
 gtacaaaact gtgatggtaa agaaataaaa gcgaactttc taacattact ttgttcaatg 420
 ctagcccgca aag 433

<210> 640
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-C3

<400> 640

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agcccttttg attacttttg ctgcccacaa ataaaacttg ctgctgaacg tagggaatat 120
gagacgagtt ttcgtgattt accttaccat cattatggta atacctagat ctatccttgc 180
ctttatgcct agctaggggc gttaaacgat agcgcttggt gggaggcaac ccaattttat 240
tttagtttct tgcttttttg ttctgttttag gaataaataa tccatctaga ttctgttttag 300
atgtgggttt atgttttaaat tagtgtttgt gccaaagtaga acctttggga agacttgggg 360
aaagtctttg cgatcttgct gtaaaaagca gaaacttttag cgctcactag attagctaca 420
actttttact gg 432

<210> 641

<211> 439

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-C6

<400> 641

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tcctcttccc ccaaaacgta ggcaggaagg gatccacag tggccaattt gaaaataggc 120
aagtagtaca tcttatcctg acgaaagggtg gtcttcgcct gctaagcttc tggtcgtgtc 180
gctgtggtgg gctcgggtgat gacatctatc ctaccgtgct ggcgatcttg gtctcgttgc 240
accgaaatgg aaacctttgc cagatgacat ccgtcctact gtgcctgtcc ttgcctcctt 300
agcaccaaac accaaacagg aaactgcctc ctctgcgccc gctggagccc acctgccatt 360
gttatcacgg ctctgcgtcac tgctagattg atggggagag agttggtgat gagggtagca 420
agattgccgt catgatcct 439

<210> 642

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-C7

<400> 642

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cggcggcgag gggaagacga ggggcaggaa gaagggcagc aaggccaaga agggcgtgga 120

gacgtacaag atctacatct tcaaggtgct caagcaggtg caccggaca tcggcatctc 180

ctccaaggcc atgtccatca tgaactcctt catcaacgac atcttcgaga agctcgccgg 240

ggagtccgcc aagctcgccc gctacaacaa gaagcccacc atcacgtccc gggagatcca 300

gacctccgtc cgctcgctc tccccggcga gctcgccaag cacgccgtct ctgagggcac 360

caaggccgtc accaagttca cctcatccta agctagtctg ccgtgtccgt gaactgatgg 420

cggcattcgg tatgtaattt aa 442

<210> 643

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-C9

<400> 643

gtccagaatt cccgggtcga cgggtatcca tctgtactat tttcatgcat gatcaaacia 60

gttaaattga tgttttaagc agaataagga aaagcactta aagaggccat gtttgagttt 120

gaaatttgaa tctttgatcc aaatttgctc aaacccttct ggtttttagtt gcattagccc 180

aacacactca tattgccatg tttcatgcat gcatcatatt gttgcacatt gtttggtgat 240

gcttgtgtat cgatgtcctt tgcgacaggt tctgtctccg aggagtaccg tgattaccct 300

aacgaagaat catatccgag catcgaacca tcaggcaagc aaccaaccat ttgatcatat 360

cgatacaatc ccatgttctc gctcctgctc tcttttactg cattaagaca acgcgattca 420

aactgctgtg tgctac 436

<210> 644

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-D1

<400> 644

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 atctttgcac actatagggg ggacgccggg cgtccacca tagaagcaat cctctatgat 180
 caagaggaaa ttagacgttt tcaatctttg gactatgtcg ctttcaatga aaaccttaga 240
 aaaaagggtcc ctatcaatgt cttgggtgat tgcacaaatg agcttaataa tgattttttc 300
 cttagaaata atgagctagg atactctctc gagtataagc tcacaagatt ttgtcaaaag 360
 aatgctttca gtgatgaaat agttgtgcac tatgaagggc caagggagga acccggttct 420
 tccgtgattg atcttgggga ttttt 445

<210> 645
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-D2
 <400> 645

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 catcgataca aaccgggact aaaaaaaggc gagggcgggt cttttcccg cgcgtaggca 120
 ggggagtttg gcatagtctg ttcgaggcaa ggaggcagga agggaaagaa gcaaataaag 180
 gttgagcgac ttagtttttg gaaaatctga ttttacggaa tatgtacca ctagggttta 240
 tagggctcat ctaaaaaaca ttcgtttttc cattttataa gtctcagttc tactactagt 300
 agtagtacca tcacatgttg gatttcgagg tgcgttagat caccgatgc aagcatgtca 360
 agagaaaact caccaatgca tgtagaagtt catggaaatt tagtggtcat tcatgcattc 420
 g 421

<210> 646
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-D5
 <400> 646

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gcggcgaggg gaagacgagg ggcaggaaga agggcagcaa ggccaagaag ggcgtggaga 120
cgtacaagat ctacatcttc aagggtgctca agcaggtgca cccggacatc ggcattctct 180
ccaaggccat gtccatcatg aactccttca tcaacgacat cttcgagaag ctcgccgggg 240
agcccgccaa gctcgccgc tacaacaaga agcccacat cactgcccg gagatccaga 300
cctccgtccg cctcgctctc cccggcgagc tcgccaagca cgccgtctct gagggcacca 360
agggcgctac caagttcacc tcattcctagg ctagtctgcc gtgtccgtga actgatggcg 420
gcaat 425

<210> 647
<211> 452
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-015-Q1-E1-D8
<400> 647

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gagagagagg gcgaataaaa cggcaagggt gaagtggggg agaggaaaac gagaggcaaa 120
tggcaaataa tgtaatgcga gagataggga ttgtgatggg tacttggtat gttgactttt 180
tgcatagact ccccgccaat ggcgccagaa atccttcttg ctacgtcttg agcttgcggt 240
ggttttccac gaagaggaag ggatgatgca gcagagtagc gtaagtattt ccctcagttt 300
ttgagaataa aggtatcaat ccagtaggag gccacgctca agtccctcgt acctgcacaa 360
aacgatagct actcacaacc aacgcgatta ggggttttta atcccttcat ggtcacttac 420
gagagtgaga tctaatagat atactatttt tg 452

<210> 648
<211> 433
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-015-Q1-E1-E1
<400> 648

attcacgggt cgacggcggg gtgggagcta aaaacaacat ttgaatgtag atagtaatag 60
acttaatatc gatgttttaa tttagtgtac attgtaatat ttgaactaag gaccatgcat 120

atgggtaatt tatttcgaat tcgtgccata ctagatttgg aaaagttggc attgactcga 180
 ttgttgtgtt attgtgtagg tcatatgttt gaatccatcc aaagttttct cactaccatg 240
 gtgttcatca tgtacatatg aatttgtatt gagaaagtag cgtggatact gtgaaatgcg 300
 aaatccacgt tagaattgga gatcactatg tgacacacac tctaattcaa ataactcctc 360
 attaattaat ttatagtatc tcctttccaa tgactaatta tttgcaaggc atacacaggc 420
 atggtaatac ata 433

<210> 649
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-E10

<400> 649

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 cggacatgat gatgaggaag atcaagacga agggcatgat catgaagatg aagatgccgg 120
 agcatacgat gatggaccat cgatgggctg ggtgcaagac cctcatattc aagagctgct 180
 tctcaagcag acggataacg caagagctgc tgcctgagag aaagccaagc tggatcaact 240
 ggacatagat gcggttactc cattgtatga aggatgcagg cccgaggata cccgcctgaa 300
 agcaacgctc atggctctgg agatgaaggt aaaacacaaa atgaccgacg catgcttcga 360
 cgagaacatg tcattctggc acgaacgtct tcccaagggg aac 403

<210> 650
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-E2

<400> 650

ggtcgacgat ctggttcaat ttggatagaa acctagtcca aaatttcctg gctgactctc 60
 caggttgttg gactatgtgg cttcagtcac cggcgtctgg tggtcggaca tatgtacctt 120
 ggaagttgtt aaggaaggct tcttccaagt cctcccatct gccgatagag ttttcaggaa 180
 gggtgtttta ctagtgccga gctggccctt tgagcttttag tgggagggtat ttgatagcgt 240

gtaggtcatc tccgcgggac atgtggatat agagaataaa atcctcgatc cataccgcgg 300
 ggtcggttgt tctgtcgtat gattcaatat taatgggttt gaacccttcg gggaattcgt 360
 gatccattac ttcacgggtg aagcaaagag ggtgtgcggc acctctatat cgggccgcat 420
 cg 422

<210> 651
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-015-Q1-E1-E3
 <400> 651

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 aataactttg gacaacttca tgccgtcatg ccccggttac ttctgggctaa tgatgaagcc 120
 attgatttct tcattacttt gacgctanga aacctctcga cccctccgag atcctcgacc 180
 ctgcaccgct cagcgatcca cgaccctcta ccctagttcc cgacccttga ccccatgtc 240
 acatttgtct agtgtcaaag gattcaacac catgtcttca tcattagacg aaagtacact 300
 agtgaagaac cgggcaatag caccggttgg taagggcctt tagtgccggt tcggtaactg 360
 gcactaaatt gtgggcacta aagccccccc ctttagtact ggttcatcac gaaccggtgc 420
 t 421

<210> 652
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-E4
 <400> 652

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 gcgccaagca gtacgccgag gactacgatg cccaggacaa ggagttgggt cagcttaagc 120
 gtgaggcccg gatgaagggt gggttttatg tcagtcttga ggccaagctg ctgtttgttg 180
 tcagaatcag aggtatcaat gccatgcacc caaagaccaa gaagatcttg cagctgttgc 240
 gtttgaggca gatattcaat ggagtgttcc tgaagggttaa caaggccacc atcaacatgc 300

tccgcagggt cgagccatat gttgcatatg ggtacccgaa cctgaagagt gtgagggagt 360
 tgatctacaa gagaggttat ggcaagctca acaagcaaaa gatccctctg accaacaaca 420
 aggtcattga ggagggtcct ggaaa 445

<210> 653
 <211> 292
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-E5
 <400> 653

ccgggtcgac atttgattct tttttcttct tctccttttt cttttgggct ctcaacttct 60
 ccccatccag cccttaaaaa aaacttctcc ccttcccacc cgagatgagc tgcagcggcg 120
 gcggcaacaa cttgtcgtga gcggaggcag cggcacagtc tggtcggcag cggcggctgc 180
 aagttcttct cgggagcggc ggcggaaga tcttctcacg gtagcagcag catcctctcg 240
 cggctacgtc gtcttcgagt tcgactcgag cctagcaggg cgtcggatgat gt 292

<210> 654
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-E8
 <400> 654

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 aacttccaac gtgacgactt gatcttcgat atcgtaacct tccgaagtgg ctatcacgca 120
 ttgctcggag ggaacgcttt tgctcgattc aacacagccc cgcactatgc gtactgaaag 180
 ctctagatgt ttgatccacg cggcatcatc acaatcaacg gtcacacgga acgctccctt 240
 tgcattctatg agcacattgc aactcttgca gccgatgtgc agcgcggccc ctcaagtcga 300
 cacatctcat cagccatcaa gctgtcggac tttgtgaaaa gagtccagtc agtctcgcat 360
 cctgatggct ctgtatttcc ggaactagac taacaatttc gcctctgt 408

<210> 655
 <211> 175

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-F6
 <400> 655
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 cggacctggt cctttgagtt ttggttatta tcttctgga gttatagatt gtgttagctg 120
 gattatgtgc cgtgctggca tttggatatt gatcttgatc cgttcgtctt gcaaa 175

<210> 656
 <211> 266
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-F7
 <400> 656
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 ggaagtcttg cagaagcggg ggcgctaaat gatccaagcg taagtacgct tgtacggtaa 120
 tcaaagccct ccagtcctgg acacgaaagt caggtcagtc gtgttcgtct tacacctacg 180
 aggatgggaa aatcctgtgg tgacccatct gatgtcgcgg taaccagat ctacccttcg 240
 cgagtaggag ttgaacccat aaagct 266

<210> 657
 <211> 391
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-015-Q1-E1-G2
 <400> 657
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 ctttgatttc agactggatc ttcacaagat catcagttgt catagtgaca acgttgact 120
 tcaggaattt ttctttcctg tactgcgctt tctaaatctg cctggccttc tcaaatttcc 180
 atttctcttc ttggatgaag gcagtcacca tatgactttg gccaggagtc aacttgaaat 240
 caggcatagg agtgtttggg tccttgtgcc agagatcaat gtaatcgagg atcaactttg 300
 gatccaaaag cagaggcaca tttgtgccct tggctctagc ggccctgact tgccatctc 360

tgatgttttc agcaagttct tcatcatcag c

391

<210> 658

<211> 408

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-G6

<400> 658

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cctgctgcca aggctcaggt ggtgggatgg ccaccagtcc gcagctatcg caagagcacg 120

atggcaacca ccaccaacca gctgaagagc agcaaggagg attctgacac gaagcagggg 180

caagagtttc tgtatgtcaa ggtcagcatg gatggtgcgc cttacctgag gaaggttgac 240

ctcaagacat acaagaacta caagggcatg gttgtggggc tagggaaaat gttcattggc 300

ttcaggacag ggaaggatgg tgaatatgtg atgacttacg aagacaagga tggagactgg 360

atgctggttg gtgacgtcgc atgggagatg ttcaccgagt cttgccgg 408

<210> 659

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-G9

<400> 659

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tctcctgat tatccacca aaatcgcat atcatgtggc taatgctctc acatagggac 180

ttagtgaggt caaacaggc catagcatag gcggggattg cctgggctac ggttttgatt 240

aaaatttctt ttcccttttt tgacaaaagt ttgattttgt atccctgaag cagctcccaa 300

attctgtccc ggaggtactc aaagcagagg cgacgcgact ttccacata acgtggtaaa 360

cctagatact tgccctgctg ttcctcattc tgaagtccaa gtaagttcag aaagatttgt 420

ttc 423

<210> 660
 <211> 172
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-H1

<400> 660

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 ttcgtgttgct tggtgctgct gcagttgttg ctgttggtgc cattgcgggt gttgccattc 120
 ttgttgctgc tgctgttggt gcctgttgct ggtgtcgttg tcgttggtgt tg 172

<210> 661
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-H2

<400> 661

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 agaaacacga cctctcgtg ggggtccgga gttggagtga cctgcccata gtccggttagc 180
 cgggtgcgta tgtctgcggc caagtatctg gccgcccga gattcgtgat gtgcttctcc 240
 ttcacggtgg agggcaccca ctgctcct gctccggaca tgtctatctg tacggagaag 300
 atttggaacta ggggtgctga gctcggggag gtaaggatga gcgaaggagg aagagggcat 360
 gggtgaaaat gaggggtcct tatcccgta tagaggccac gaagtgggtgc g 411

<210> 662
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-H3

<400> 662

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 taacacactc ggttttcaat atcaatcgtc cgatgaacgg cggcactccg gctcatgacc 180

ataagccgca ggtcaccagt aagattgctt catttcagca gttcatcgct catgacttcg 240
atgccagtga ccacggcact tcgagcttcc cggttgcagc tggtcacagg atcggcatat 300
tagacatcag gattttcaac actgacaggc atgggtggcaa tgtcctgggtg aggaagcttg 360
atggaggaac cggccgcttt ggttgccaaa cagaactggt cccaattgat catgggctgt 420
gcttaccgga gaact 435

<210> 663
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-015-Q1-E1-H8

<400> 663

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ggctgccggg ggcgggtatgc tctcagcgct caccagctga gccccggggc cgctccagtg 180
accggcctgt caacggcgac cgacgccttg gtattctggt gcttcggctt tggtcgtcgc 240
ctgtgttaag gccgatgttt ttgtgaacat gatgtggaca tgacaacggc atcctacccc 300
ccctaagtaa ttatggacga ccgaggcggt gcagtgtgta ctgtactgca cccctagat 360
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tccaaggcaa ccg 433

<210> 664
<211> 372
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-A1

<400> 664

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gagagagagc atgggatcct gtatgtaatg cctggctctgg agtccgaact ggtggtagtc 120
tgtagcgctg attgatcttg aatcaccgct gaattgaagc tggaaacttg atcgtttagc 180
caattacaaa aaaaagagaa aaaaaaagaa aatagaagca gaagagagta agaaaaggga 240

agagagaaga cagaggaaaa agcaaatggt gaaagtcaag ggacgaaaaa aaagcggccg 300
ccctaaagga ttcaagctta atttagcgtg cagggaaggt caaagccctt ccaaagtgtc 360
accaaaattc aa 372

<210> 665
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-A5

<400> 665

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ttgtctatga tctgccacct atatatgact gtatgatctg ccacctttat atatgatatg 180
acttagtagt gttaacaaaa aaaaataaac tccaacatgt acccgcgcaa ggtgtagttc 240
agaaagagac aggagtaaata acccatgttc gtacaactct tcacatcaaa aaaagtggcc 300
cccctaaagg ttcaagtctt actatacctt gaatgaaact taaaacttct tcaaaattgc 360
cactcaattt aaatccatgg cccttctttt aaaaattttt aaacgggaaa aaccggggct 420
ttaccaattt taaccc 436

<210> 666
<211> 358
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-016-Q1-E1-A7

<400> 666

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aggatattgc tctggcatct tttatcagcc ggcagattgg tactacgtat cctccagcct 180
acttttttca gctggatgat gatcgtgatg aaataagact gtaggttagt cgagtgatga 240
tgattgtcgg catttgcctt atttttaatg gacgcgtatg cttgcatgta acctgttggt 300

gacttgcatt tgcattgntg cgatcgatat gaaaatatga gagattttgt tgggtttc 358

<210> 667
 <211> 367
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-B1
 <400> 667

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 tatatacgct cttctcaaag ggaagcacgg atttgatact tgtgccaaag ctcgtttttg 180
 aaatcataag tgaataacat tttgaacagt ataatttcat tgtcacaatt acaatcaaca 240
 tatcgcaata tcttccatgc tacacacact agatgcgggt cccaacata atggctaaat 300
 ttgtactcgc ccatccagca acaatcatca atccattgat tgctccaatc aacgagtgcc 360
 tctact 367

<210> 668
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-B2
 <400> 668

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 agcgatttgg gtgaaggagt tcatcactga cctaggagtc atacccaatg cgtcggggcc 120
 aatcaaactc ttctgtgaca aactggagc tattgccctt gccaggagc ccaggtttca 180
 caagaagacc aggcacatca agcgtcgttt caactccatc cgtgaaaatg ttcaagatgg 240
 agacatagaa atttgtgaag tacatacgga tctgaatgtc gcagatccgt tgactaaacc 300
 tctctcgcga gctaaacatg atcaacacca gaactctatg ggtgttcgat tcatcacaat 360
 gtaactagat tggtgactct agtgcaagtg gg 392

<210> 669
 <211> 410
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-B4

<400> 669

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catatattgg ttcacctgtt ttctggattg gcgttggtgt agcattatct gcggcatttt 120
ccatgggtctc ttcatgggta aagaatatg caatggaaca agcattcaag tcgatgatga 180
cccaggcacc accaaacaca ttgttgtaa actcgccatt cccattctcc atgccaccac 240
aggcaggttc cacggcacca agtagttacc catactcagg accaaggaaa aataccccaa 300
aagtggaac tggtgatgtt tcagctactg atgtggcagc aactggatct tcggaagcag 360
ctgatgtggc agaaacatcg aagccttcaa agaaatttgc cttcgttgat 410

<210> 670

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-B5

<400> 670

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gcagaggcaa gtctccagc ttgaccacat cttcatgggtg ctccctgccg ccatgcattg 120
gtatggacat ggaactgggc cccttggac atgaacgggtg gctctcctct agacattcca 180
caagtgaag cacgtcgtgg gcatcctatt tgcgagtgtg agcatcgtcc acctacagta 240
atgtgcaacc acattgcac attccaacgt tcggcacact actgattcgt cacaggcctg 300
agaatctcat ttgcctcaca acatggagat atcagaacag ataagtatga tgcattagct 360
agcttttcag gggtttaag 379

<210> 671

<211> 391

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-B7

<400> 671

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 ctaaaaagac ttatatattag gaacggaggg agtacatgac ctaatacaaa cacaatgatt 180
 caagtagtaa ttgaagtgca gaaggacaag tatttgagaa tagttggata gcctataagg 240
 tcactgtttt tgaaacagag ggtttgtact gataattttt tcattctaga ctaagatatt 300
 ctagagcaac attgggtcatg ccagatgatt ttgatattcc gaaggactac aagtaaagca 360
 caatgctgca ttacacacct ttaaaagctc a 391

<210> 672
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-B8
 <400> 672

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 tggcagcgac tgccatgtcc gccgccggtc aggatcccca aaactgcaag ccgagccgca 180
 aggttacggg gcagaacctg tgccggcaagg acctttacct cggcacgcag ccgctggcca 240
 acagcaagct actctacagc cctggccacc tgctccgcca cggcacccac gtgtcgtacg 300
 acgtgtgctc gtggacgggg cgcgtaagg tgcaggacgc cgtggtgacg gagttccaca 360
 tcgggtacga cggcggggcg tggtagcaag tgagcaccta ccagtcgcac atgcgcaccc 420
 gtggtcccaa caaccccaa gggcaacccc tg 452

<210> 673
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-C2
 <400> 673

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cttccccgctt catcaagcgg gtccttggct ccgtcggatg tagattccat tccgaccgcc 180
tccacccctc gtgatgctga ggatgccgag gtgggatccc aggaggggac ccgccaagag 240
ggggaggctc cggaggtgcc atagggcaac ctccccggct tcgtgccgaa ctccgcaccg 300
gaacccgcag tggttccgga gtccggcagg cggccccctc gtaagaaggg aaagaccgtg 360
aactggcag cctccgttca accggaggcg ccggacaaac ttgttgagg cgctc 415

<210> 674
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-C6

<400> 674

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ccgccaagga gggcggcgac aagaaggga ggaagaaggc caagaagagc gtggagacgt 120
acaagatcta catcttcaag gtgctgaagc aggtgcaccc cgacatcggc atctcctcca 180
aggccatgtc catcatgaac tccttcatca acgacatctt cgagaagctc gccggcgagg 240
ccgccaagct ggcgcggtac aacaagaagc caaccatcac gtccccgggag atccagacct 300
ccgtccgcct cgctctcccc ggcgagctcg ccaagcacgc cgtctccgag ggaccaagg 360
ctgtcaccaa gttcacctcc tcttaggtg ttcgtcttcc tgtgtctcgt agttagcgg 420
tcgggtgtg 429

<210> 675
<211> 355
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-016-Q1-E1-C7

<400> 675

gggtcgacgg ngtcaccata atgcggtccg agaaggtaa ggatgagatc gtcctcgacg 60
gcaacgacat cgagctcgtc tcccgtccg ccgcccctcat caaccagaaa tgccacgtca 120
agaacaagga tatcaggaag ttcttgagc gtatctacgt cagcgacaag ggcgccatca 180
aggaggagta gagtgcgaaa accgtcccag aagccgtgtt tctgcctgcc gtgtttcatc 240

gtctttgtgt cgtggttgtg attttgaact ttctctagac tgaattttgt agtggagtta 300
attagggatg cgctatgcaa catgttatcc ttattatcct acatattgtc acccg 355

<210> 676
<211> 425
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-016-Q1-E1-C8

<400> 676

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gaggcttgcc tcgtcttcgg agggaggcat gcaattatcg tcctcaacct ctctttctgc 120
cgctctctca tgagggctgg ctctccatc ctctgtgt aaatcctgct ggaggggggtt 180
gtcttcggca ctgtctgagg tggtattatc tcccatgcc aatcgccgt ttttgctttg 240
gcaggattta gagcggcgcc gctgacgcc acgcttaggc tgtttcttgg aggggtcatc 300
ctccgttggt ccgtcgccat tcccttcttt tgggggtgcc accatgtata tgctgatga 360
cgaggtggct ttccagtgcc ctatangcgc tggttcttgg tcgtctcctt catcagcgtc 420
catac 425

<210> 677
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-D1

<400> 677

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gtgttcttta catcgatttc aacgaaatca cctcaccttt ccagtggcac gcttggaattt 120
ccaagttgag gccgggttca ttctttcctt atcaaactctt gcatatgcat cacatatcgc 180
atcccgcata gcataccatg tttgcatcat gttgtttgag ctttgcacgt ggttgattgt 240
gttctctttg catgtttgtc ttgtttgggt agagccggga gacgagttcg ctaacgagga 300
gcccgttgag tttgctttgg aggatccagt caactctgac aactttgcag gcaagatgat 360

cataccctcg aaatcacttc aatcgttg

388

<210> 678

<211> 418

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-D2

<400> 678

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ttatgtaatg aagtcggagc atgatttatt tattgattgt cttccttatg agtggcggtc 120

ggggacgagc gatggtatgt tctaccaat ctatccccct aggagcatgc gcgtaataact 180

ttgctttgat aacttctaga tttttgcaat aagtatatga gttctttatg actaatgttg 240

agtccatgga ttatacgcac tctcaccctt ccacctttgc tagtctctct aataccgcgc 300

accttttgcc ggtatcatat acctaccata taccttcctc aaaacagcca ccatatctac 360

ctattatggc attttcatag ccattccgag atatatttcc atgcaacttt ccagcatc 418

<210> 679

<211> 368

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-D5

<400> 679

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ggatcgctct gtgcgtatct gagtccttgc attttactat accgacagtc attccttgct 120

gtacacatct gtttgggaga ttactacaga tggaatcaac tatttatgat gagtcactct 180

aacgtccttc atcgatatgat cttttaagtc aagatactct ggccctatat gcttcactaa 240

cgtgcgtcgt aaaataccgg tggatgatgcc atgttatata tgcacatgat gacccaagcg 300

tgtgttagat tgatatgcta ggcattgata ggatcaggct atctagctgt ggatctgaag 360

taaccct 368

<210> 680

<211> 413

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-016-Q1-E1-D6

<400> 680

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ccctaggagg ataacgccc accgacggca tgatctgtct ggcgcgagtc cattgcgtgg 180

cgcattgggc gctcgaatcc tcctgtgctg gataattgcy gtcctcttgg gagccttcca 240

atctccattt ccccatcacc agtccgctgg agtatgagtc ctaccgggac cgggtgtgccc 300

gtcgtgggaa ggagaggatg agggcgggcg atgccgcct cgcagccgac atggccgtgg 360

cagaggcggg tgatgtggcg cgcggggcagc cgcagagaag gaagccatcc agg 413

<210> 681

<211> 408

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-016-Q1-E1-D7

<400> 681

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agatgaaata accaacttca ttgtagaaga tttgaaggcc atcaagaagc caaagataat 120

cgtggatcat gtcatcacca gttgaaatgt ggtattctct tggagcgctt tctcatcatc 180

ctacatttcc actctgtttg ttgagattat tgattttatc gatgccgttc gtactccaac 240

aaatacggtt cctgtacgcc actattattt atttggtttt gaacttgaca ccttattttca 300

ttctgggctt gtaagttgat gttgcaagag ttgatgttgc aagagttgat tttaactcga 360

aaaaaaaaa gagaaaaaaaa aaagcggccg ctctagaaga ttcaagct 408

<210> 682

<211> 432

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-016-Q1-E1-E4

<400> 682

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gatcttcacc atagtctga aaaagattcc tagtctacaa agaataaaac caacaaaaac 120
aacaagacac acagatataa actcttcaaa tctgaacaat taaatcaggg aggacacata 180
catacctcca tgccgccacc aaaaagggca gagtaatttt tttcgcaaga aacatcatga 240
tcaccactag acaccgataa aaaaataatc tattgatgat ccgaggtccc tactctcgg 300
tgaagatgac agctgaagga gaggggatta aatatatctc cgatggccga tacttctca 360
aaccttagcc aactgttgat ctctagccag cccgctgga ccaactcaag gtcagagtgc 420
gacactgctt tc 432

<210> 683
<211> 435
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-016-Q1-E1-E8
<400> 683

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gtggaggagg tattgcggtta aggacggaaa ccaactggag tctcaagccc gtgatcttcc 120
acccaagta actccatgaa ggccttcac ttgacagaaa gcaacttgcc attagtcac 180
caagtcagag tccattcggc atcagtcacca agatggacag tggcatagaa ttgggccacc 240
aaatttgcac caaagtcctt gttgaattgc atgatactga ggatgttcag ccgagtgcac 300
atctaaaggg cttcgccaaa gtactcaggg tccttctcca tagaatccgt atcgatggag 360
cgcacatcaa catatagatt cttcttgccc ttgatcacat caaagtagat ggcaaattga 420
aaatgattct agaat 435

<210> 684
<211> 390
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-016-Q1-E1-F10
<400> 684

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acaggggtccc gattgggtttt tgggtggctac agaggcttgt ggcggtggaa ctctgatct 120
attctgctcc tcgatgtttc tagagtatat ggacatatat aggagaaaca agtcggtcag 180
gggaaccatg aggggcccac gaggggtgggg ggcgcgcctc cctgccttgt ggcttcctcg 240
ttgcatccct gacatactct ccaagtctcc tggattgctt cagttccaaa attaaactctc 300
ccgaagggtt cattccgttt ggactccgtt tgatattcct tttctttgaa acaccgaaat 360
aggcaagaaa acagcaattt ggggtgggct 390

<210> 685
<211> 377
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-016-Q1-E1-F11

<400> 685
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ttgaaggcca tcaagaagcc aaagataatc gtggatcatg tcatcaccag ttgaaatgtg 120
gtattctctt ggagcgcttt ctcatcatcc tacatttcca ctctgtttgt tgagattatt 180
gattttatcg atgccgttcg tactccaaca aatacggttc ctgtacgcca ctattattta 240
tttggttttg aacttgacac cttatttcat tctgggcttg taagttgatg ttgcaagagt 300
tgatgttgca agagttgatt ttaactcgaa aaaaaaaatg aaaaaaaaaa aagcggccgc 360
tctagaggat ccaagct 377

<210> 686
<211> 444
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-016-Q1-E1-F2

<400> 686
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aggtgctctt ttaattgcct tccttatgag tggaggtcgg gatcgcgcga tggttaactc 180
ctaccaaccc gtcccctagg agcatgcgta gtagtacttt gcttcgaggg caagtagact 240

tttgaataa gtatatgagt tctttatgac taatgtgatt ccatggatat acgcacactc 300
atccttcac tttgctagcc tctattatac cgtgcaactt tagccggtat catgcacca 360
ttatttacct tctcaaaac agccaccata cctacctatt atggcatttc catagccatt 420
ccaagatata tttccatgca actt 444

<210> 687
<211> 395
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-016-Q1-E1-F4
<400> 687

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tagatacatc ggggttatcc aaggcatggt gggggaggct atattgacga catgtcatgt 120
cctgaataaa gttctgacaa aggataatga gatcactccc tatgagaaat gggcaaagag 180
aaggacaaca ctcttgact tgcgtacttg gggctggttg gcgaaagtca atgtgccgat 240
ccccaaaaag cctaagcttg gaccaaagac tgtggactgc gttaatttgg gctacgcgaa 300
gaacagtgtt ggctatagat gtctagtagt gaaatctgag gtacctgacc agacagtcgg 360
tacaattagt gagtctaagg atgctacatt ctctcg 395

<210> 688
<211> 405
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-016-Q1-E1-F5
<400> 688

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aggattcctt ccttatacca tgccttatgc acaaatatca tattttttata gaggcgacca 180
tcagaatgca gcgccgagcc cctggggact cgtcagcaaa aggtatccgg gccaggaagg 240
ctcaagagga aggcgggttag ggtcgaaaca ccatcgaga ggtatagttt aattctgctc 300
tgtgattatc atgctagaaa tgtaacagtt tccatcgtgt cctggcacia agagtagtcg 360

ccagactatg tccggagatc ctgccggtca cgcctccacc agccg

405

<210> 689

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-F6

<400> 689

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aaccatgttc cccagcgtac catcataaac ctgtgtcgtc tgattacccc gcgatcttga 180

agttgcaccg tatctgtgac gctgaatggg gttaacgttt tggattgtct cgataacttt 240

atattagaat tgaatgcaag ctaaataacc ctgaaattga aaaacagctg acgcgctata 300

ggatccagtc ttacgtacgc atgcatgcga cgtcacagct cttcaacatg ttcacctaaa 360

ttcaaatcat tagca 375

<210> 690

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-F8

<400> 690

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gaggagggag gtgatggcgg ccaggaagaa aactaggcga agctctggat gctccatcat 120

gcacttgatg tgtggcagca cgtgtgctgc ctgaattagc accctggact gactctggag 180

acgaagcatg gtgtagtggc aagtcgattt gctgacatag cgcgggcgtc tttctaattgc 240

ttcggttctg tttagctact acgatatgtt gcgtgtttcg gtttctactt cccaatcctg 300

gagctgtcta cgatcgacta ttcggattgt aggtgtaatg ttatgtaagc gaggttggtg 360

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<210> 691

<211> 428

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-016-Q1-E1-F9

<400> 691

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gcaaatgata gtggtgctct ccaactgggtg cttttcaata agaggatgat gactcaacat   120
aaaagtaa atagataggccc ttcgcagagg gaagaaggga tttgtagagg tgccacagct   180
cggttttgaa atagatatga ataatatatt gagccgtata ctttcattgt caacataaca   240
accaagagat ggcgatatct tccgtgctac agacattata tgcggttccg aaacagaatg   300
gtaaagttaa tactccccct ccaggaacaa gcatcaatcc atggcttgct cgaaacaacg   360
agttcctcca agtaacaaca atcccggggg agtttttttt gcaattaatt tgattttatt   420
tgcgttaa                                         428
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<210> 692

<211> 404

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-016-Q1-E1-G1

<400> 692

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gcgcgtgatg ccatgagcta tatcatgttc cttgttatat gcaattagag actttcaaca   120
tgtagatttg cttccaagac ttctgtcata gaagagtacc tttcctgttg tcccacggta   180
ccatcttgaa ttaatgaatc ttggctacct ttagttcgt aaaaaaaaaa aaaaaaaaaa   240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ccaaaaaaaaaa   300
aaaaaaaaaa aaaaaaaaaa aaggggccgc cctaaagggt ccaagcttac ttacgcgtgc   360
atgcaacttc aaagcccttc aaaagggtca ccaaaattca attc                                         404
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<210> 693

<211> 439

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-016-Q1-E1-G2

<400> 693

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gtgaaaactc tcgggttcac atggattang gaaggcatag gttcaaccca tangggcatc 180
ttaggaacat ataccacaaa cctcaggagt aatataacac aagctcgaag gcagaggata 240
caatttacca aaggcattat gtatccgagg aaaggctcaa aaggttatta aatatgaagg 300
acgttgctcg ataaaatcca acaaaggatc tggcgggtcca cataggatct gatgtgagta 360
tcggtactca accagaagaa gaaagaatgc aaaggcatca gattgtagat atatctggat 420
aacttcaaag cttgaatac 439

<210> 694

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-G4

<400> 694

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tccccattgc ttctacctgg tgccatggtg gcgcagctga tcacgaagta cgaggtgagg 180
ctctgacac aggagctcca tgccaaggat gcggagctca gggccaagga cgtggagctc 240
catgagctca aggaggagag gagtgccatg ctctccggtt atgtgcggga gttcacggag 300
cttcaaaagc ggcagccgtc caccacaaag atgtcgcagg cgttggcggc gttgctgcag 360
aaagagggag atacgatagg ccgtcagggg agccggttgg agcgcgagcg ggccgatcgt 420
gacgaggtcc aggatcgctt cagccac 447

<210> 695

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-016-Q1-E1-G5

<400> 695

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 caacctgttc cgctgccgca gcttccacct cggcaccctc tcaggtgctt tgctggctgt 180
 tgcttgggtt ttccaactct gcaaaacgtc acccaccctt ttctgtggaca ttgttcttgg 240
 ctctgtgttc tacaagctaa gcgttttctc cggacagttg caaagggagg gcaagtcatt 300
 tagcatatgt gcacggatac agctagtctt tctgtcttatt ttgtctttca aggataacgg 360
 tgcttctcaa ggcttctacc gctttcttgt ggaatcaatc tggttgctca acat 414

<210> 696
 <211> 376
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-G6
 <400> 696

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 ctgcactaga ggaggagacg gtcattggagg agaccatccg cgtgacacgt gccaagctaa 120
 ggaggcgcg cgcgcgag ggcggcgcat gaaactagct gcaaaccatt gttttattgg 180
 cgcattggtt tggtgctctt atttttttga gtctttttta gattgtcatg ttgtctggtg 240
 gagagaatat ctgttggtca tccaattggt ccttctgttt cagagttatc acccgttctt 300
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<210> 697
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-G7
 <400> 697

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 atcagaagaa aaaccgcact gcacagacg ggtaagagaa ctgcttggtt tcttttattc 120
 aaacataatt ttttcaagga cgagaaagta gactgcactt cacatcgagt gtaaatgaag 180

cacaacacta tcaagaagtg aaccgcacta cttttttgct tctgtaagaa ttttttgcac 240
 ttacggatga acaacatcat acaacggacc gcactgcacg ggacaggcaa gtgaacccca 300
 taagttttct cttttttcaa actttttctac gcttatttgt gaacctcatg gtcaaagtta 360
 gtgaaccgcg tggcctagac tagagaacaa catttttttg ttggtgaaag taaatcgag 420
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<210> 698
 <211> 421
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 <223> Clone ID: LIB103-016-Q1-E1-G9
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 ccttggcatc aaagctgcc aatgggtgtagt tattgccacc gagaagaaac tgccttctat 180
 tttagtggac gaaacatctg tgcaaaagat tcagtcatta actccaaata tcggtgttgt 240
 ctacagtggg atgggtccag attttcgtgt tcttgtcaga aaaagtcgga agcaggcaca 300
 gcagtattat cggttgtaca aggaaccat cctgttacc cagcttgtcc gagagactgc 360
 tgctgttatg caggagtcca ctcaatctgg tggcgtaaga ccgtttggtg tagcactgtt 420
 g 421

<210> 699
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-H10
 <400> 699

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 ggctcgtttc ctctctggag ctcttggaag tttcaattgt gaaatagagg agcttgtaga 180
 ggcgaaagtgc ggcgtaggag acgacgcat tgttggtatg gttgtccccg gttttgcctg 240

atactgtatc ccgttgcgag aaatactgta acaaatccgt ccgtggtgta cctagttaaa 300
 ttatcgagaa gtgacattag aaatggtctg tggagagctt tggtaataag cgggtgcttct 360
 gtgcctggta gaatcaaaaa ggagaaatca aaccaagtgt ccgagcagtt aaaaaggaaa 420
 aaggg 425

<210> 700
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-H3
 <400> 700

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 cgtgagtatg atggaaagga aaattgtgct caagtgctag aagaagaatg cattaataatg 180
 cttgatacta aatatttgaa tgatgagcat gattgcaatg ttgttagtat gaattccttg 240
 aatatccagg atgctaata gaatgcaaagc cacaagcttg gggaagctat gtttgatgaa 300
 tataatatatt tttgtccccc aagttttgat gagaatatatt attatgatga aagcatgcct 360
 cctatttatg atgattatat tgatgaaagt gggtttgga gagtgtcaac tttagtaagt 420
 agtgatccca ctatttt 437

<210> 701
 <211> 474
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-H6
 <400> 701

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 cagatgcgca atgtggtggt gcatatccgc gatgtgcaag gcctgaaggg aactggatcc 120
 atggaggcca ggcttgaagc tatggaacag gaagtcttcc gctgcaaggg gatggtggaa 180
 catggactca atgccaatca cctcatgatc gcggactaca cccgtgatct caaggtggat 240
 ggcaattcca tgaaggacat catcttctcc ttcaaagagc aaatcaactt cctccagagc 300

cagatctacg acctccaaaa ccaagtcttt gaatatgagg caaggtttaa aggtatgagt 360
 ttggctgccg gttgcaggaa tcgagagact cactcttcct cttacgacgg tgagcctcta 420
 ccatggaaac ctgaggacaa gattgcttct acttctacac taccaactcc ttct 474

<210> 702
 <211> 311
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-016-Q1-E1-H7
 <400> 702

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 cggctcagta gtctaagtac ctacgcgagc ttctgctgga atgtatgca tgagaaggaa 180
 agcagttgga atttggggat gcacggacgg tcgaaaggat acagccggag gtgctcatac 240
 cagcaacatc gcaactctac tcaactgtcac gaacactaac tgtagcgtga ggcatac 300
 tgaatcataa c 311

<210> 703
 <211> 363
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-A1
 <400> 703

gtaccggccc taaattcccg ggtcgacggg gtctacaacg tatacgtctc ggagtgcgcg 60
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 ttgaaatddd ttctgtcccc agtggtcggg tggcgagatt cgtcctcacc ttcacttggc 180
 ggctccttcc ctttgtgttt ggtgcttagc ttgccagcct acttgaagac ccaacattct 240
 ttgttggtgt gattcgcagg tttctcggtg gtgccgttaa tctgacagga cttgtctaga 300
 cttttattta agctggacgg accatctccg caggcttcaa atggcttttt ccgttgaccg 360
 ggt 363

<210> 704
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-A6

<400> 704

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 tcaacaccag tctacccgct agtcttccgc aatccagtgt cagaagcaga agcctcgggg 180
 gtggctgagg ctagtaatgc tgggcgtacc acaccgagtg atgacagcct ggcttctcct 240
 gtgtggaggg gcagtttggc gagtcctgag ctcaagttcc atgacacact gagtgaactt 300
 cggaagatgg aggcttctcc tgagccgaac acaagctcta ggagggaagg attcagatgg 360
 agcagtgcta gcagctatga ttttggatat gatggtgatg ccattgacat ttcagaccat 420
 atcagc 426

<210> 705
 <211> 299
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-A7

<400> 705

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 attccccgagg tgacattggg gtaatctatg cataggggtt gatgcatggt cttgtctttg 180
 tttctctggt agaaatcttg gggcattatt tgaagttcta tgtgctggat tgatgtatta 240
 tgaatctgaa tttgctttgg tggtatctag tacagtctct tggttagatc tatcagatt 299

<210> 706
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-A8

<400> 706

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 cgggatcaca tcattaggag aatgatgtga ttgacttgac ccattccgtt agcttagcac 120
 ttgatcggtt agtatgattg ctattgcttt ttcattgactt atacatgtta ctatgactat 180
 gagattatgc aactcccgtt taccgaagga acactttgtg tgctacaaa cgtcacaacg 240
 taactgggtg attataaagg tgatctacat gtgtctccga aggtacttgt tgagtttgcg 300
 tatttcgaga ttaggatttg tcaactccgat tgcggagag gtatctctgg gccctctcgg 360
 taatgcacat cactataagc ttgtaagcaa tgtgactaat gagttagttg caggatgatg 420
 cattacggaa cgagtaaaga ga 442

<210> 707
 <211> 417
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-A9
 <400> 707

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 cattgttccc tttgtcatcg gtatgttact tgctgagat tcgatcgtcg gtatcatcat 180
 acctatttca atctcggtac cggcaagtct ctttactcgt tccgtaatgc ttcattcctt 240
 aactaactca ttagtcacat tgggtgcagg gcttatagtg atgagcatta ctgagagggc 300
 ccagagatac ctctctgata catggagtga caaatcctag tctcgatcta tgccaaccca 360
 acaaacaact tcagagacac ctgtagagga tctttataat caaccagtta cgttgtg 417

<210> 708
 <211> 410
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-B10
 <400> 708

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 gggttcggct ggcgcttccc ggtaaatttt gtcggcgcaa aataaaacat ccttcctgtc 120

ccaaggacag agatgacact tatccggcct ggcattctca gcatgttgta tgcataattga 180
gaggttgcta tgaatttggc gagtgctgga cggccgagta tcccattgta aggcaatgga 240
aagtcagcaa cgtcaaaagt gaccctctca gtcctgaagt tcaactcact gccaaatgtt 300
accggcaaca tgatctttcc ctccagcttg ctcttcccg aattgattcc ttggaatgtg 360
ccggtctctt cgagctcgct atcaaggatc tggagtttct ggagtaccgc 410

<210> 709
<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-B6

<400> 709

ggtcataaaa ctcccgggtc gacgaacata acaatcgtaa gtcgtactag tgaagtcact 60
gtgagataac ggtggtgttt cgcggatgga gctgtgacgt tattgtcgct 110

<210> 710
<211> 428
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-017-Q1-E1-C12

<400> 710

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ccaaggaagc cggcggcgag gggaagacga agggcangaa gaaaggcaac aagccaagaa 120
gagcgtggag acgtacaaga tctacatctt caaggtgctg aagcaggtgc acccagacgt 180
gggcatctcc tccaaggcca tgtccatcat gaactccttc atcaacgaca tcttcgagaa 240
gctcgccggg gagtcggcca agctcgcccg ctacaacaag aagcccacca tcacgtcccg 300
ggagatccag acctctgtgc gctcgtcct ccccggggag ctgccaagc acgccgtctc 360
cgagggcacc aaggccgtca ccaagttcac ctctcctag acaacttaag cttgatcctc 420
gtcgcttc 428

<210> 711

<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-C3

<400> 711

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tgggaggctg ccatgaattt ggcgagcact ggacggccga gtatcccatt gtaaggcaat 120
ggaaagtcgg caacgtcaaa agtgaccctc tcagtcctga agttcagctc actgccaaat 180
gtcaccggca acgtgatctt tcccttcggc ttgctccttc ccggattgat tccttgaaat 240
gcgccggtct cttcaagctc gctgtcaggg atctggagtt tctggagcac cgcgggggag 300
atcaggttca agccggcccc gccgtcaact agcatcttag tgaccttgag gttgcggata 360
attgggtaaa ccaacatcgg caagcaccgc accgcagttg tgcgatctgg gtggtcctca 420
atatc 425

<210> 712
<211> 318
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-C6

<400> 712

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tgccgaggcc gtgcggcttg tgggaggcgg ggcgcgcgg tgggtggtgc tcgtggacga 120
cgacaccgtg ctgtccccgg acaacctggt ggtgtgctcg ggaagtacga ctggagggag 180
atggtgtacg tcggggcctc gtcggagagc cactcggcca acagctattt cagccacggc 240
ccctcgccgc tgtgtcgcgc cggacactcg aacgtgttgc tcgagagggt acccaggctg 300
tagggaagcc acgaccgc 318

<210> 713
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-C7

<400> 713

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gcagagcacc cctgaagatc aaggactgtc tagacaatgt aattcatggt aaaagagatc 120

cagtcacatt cataactcaac ataaattaat agcaatgcat gcaaatagata gcagttctct 180

ccaactgggtg ctttttaata agaggatgat gactcaacat aaaagtaaat agataggccc 240

ttcgtagagg gaagcagga tttgcagagg tgccagagct cgagttttga aacagagata 300

aataatattt tgagcggcat actttcattg tcaacataac aaccaagaaa tctcgatacc 360

ttccatgcta catacattat aggtgggttca caaacagaat ggtaaagttt atactcgccc 420

accaccaacg agcatc 436

<210> 714

<211> 408

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-017-Q1-E1-D1

<400> 714

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agggctcatt atcgaggcg ttactcagcc cagtatatgt tgtaaagtcc gaatacctta 180

gggagtgttc ggcgtcgcga gtttggcctt atatgcatca gctccaaatc atgtcttggg 240

tcaatagttg ggttttcccg gctcccggtt ttttctacct tacgttttgc tctatcggt 300

aagggtggcac cagggagaac tactgcgatt gtaccctggt tcgtctggat gagcacctta 360

gtagagaaag ccgaaaactg actgtcatga tatagcgca gactggtc 408

<210> 715

<211> 230

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-017-Q1-E1-D3

<400> 715

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gtcttttgat tcttctgtgg atgagggtgaa gaagcaatat acgaagttgt cactgttgggt 120
ccatcctgac aagtgcaagc atccacaagc acaagaagct tttggagccc tggcaaaagc 180
acagcagctc ctacgtgatc cacacgaaag aaggtacatt cccgattaag 230

<210> 716
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-D9

<400> 716

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tggtagagat attggagcag atgagatgag agaataacct tgaagttcag tggtttgtaa 180
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ttgtcattga gggaggaata caactcctga atcacatctg tcagggggga agatggtaag 300
gcattacctc catctccctg gtaagctttg ttgagaccac tggttgcttt tggccctgggt 360
attgatcgta tgggcttttg tgagcattgt tgtctcttct cccacttggc gcttatctgc 420
tgtcgtcggg ac 432

<210> 717
<211> 421
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-E1

<400> 717

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aaaggaacca ggcacttcgt cagccacccc cggcgccggc gggacgacgg cggtccaac 120
gcaccatcgt tctgatctc cacgggtctc gcacctctac aagagagttt gtcacatgc 180
acagccccag taagcgggtg attacctctg tgtccaaacg ccttgccgtg tccaatctcc 240
aaggctgggc agacctccca gatgacctgc tgactcaat tgttgctctc ttgggctcct 300
ccattgacct tcttgctttt gctgccacct gccgcccttg gcgtgccgct ttcttctcac 360

acccatccaa atctaccttg tgcttctcat gccccctgt tctcaccga aaaaaccca 420
t 421

<210> 718
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-E2

<400> 718

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agcctcaggt cgcgccgccc cctccggaga ggtcatcgtc ctcgtccgac cacagcaccg 120
caaacaacaa cagccaccac gactggcgcg aagggtcgtc ggtgctggac ctcaacggtg 180
acaactactt ctcgtgcgcc gtcgggagga agcgctccaa cgcccgttac ctgctcaact 240
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tttgctctg ctaatcagca atcaccggc cgcgggccc gc 402

<210> 719
<211> 95
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-E5

<400> 719

ggcatgaac tccgggtcga cggaatgtac tagactgagt cagtatagaa acttcgggca 60
agtgtgttga ttgtaggagc attgagacgc aaagg 95

<210> 720
<211> 355
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-E6

<400> 720

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cttggttagct tctcatgggc tccatggtgt tggatgatgt ggagggagga gggttcgtgt 240
tagctaagtt agtccactcc ctctgttcgt gttttgtaag ttaattagta gtagtgtgtgc 300
tactagtata tggaacttta aatcggttca ccggcgaaaa agagcagggg ggcgc 355

<210> 721
<211> 137
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-E8

<400> 721

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gatggattac ggaacaagga gtgtcaagag cctaagcttg gggactccca cagatttcca 120
atgtaaacgg acggaca 137

<210> 722
<211> 421
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-017-Q1-E1-E9

<400> 722

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gacgaagaag acgaggattc ggaggacgaa ggggacgaag acgaagactc cgacgaggan 120
ggggaggacg aaggccaaga ctctgacgac gacgacgaag acgaggacga ggactcggat 180
gaggaggagg acgacgaaga cgaggaggag gaggaggagg aggacgacga gtagcatggg 240
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tgaagggtcg gtttgactg atgcttaact gtagtaagg gatggcactc ggtaaccgaa 360
tgttgcggat gaagaatatt gactcgggca tgactaaata ttgtcctcag ggttgatggc 420
t 421

<210> 723
 <211> 407
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-017-Q1-E1-F1

 <400> 723

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 acacagacta aattctgaat cagtttagag acacaagaac attattaaga taaagtggtc 180
 tagagggtgga gcgaaaacta gtggaaccaa tgtgagtgat aggaagacca acaccattac 240
 cgacaatgat acgagaagaa gtgtggatag gagacacgga agagagggtta cccgggtaag 300
 cggccatatg cgaagatgca ccgatgtcca taaaccagtc gccaccgtcg gaataagccc 360
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<210> 724
 <211> 382
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-017-Q1-E1-F2

 <400> 724

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 ataatccgga tgtggcctgg cgactccctt cccaatagct acttcggcct ggtgaggcgg 180
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<210> 725
 <211> 390
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-F6

<400> 725

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atttcgggag aggagagggt gttttgctgc ccacggttgg cgcccatggt gtatgaacgg 300
ggctgatacg tacggcggtt gtgtcacgtc tgatggaagt tacacatctg cccctattta 360
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<210> 726

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-F7

<400> 726

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aaagcttggt atccttgcta acaactgcc tccgctccgc aagtctgaga ttgagtacta 180
tgctatgttg gcgaagatca ctgtccacca ctaccatgga aacaatgttg atttggaac 240
tgctgtggt aaatacttcc gagtctgctg cctgagtatc atcgaccctg gcgattccga 300
catcatcaac gcaacaccag ctggccagta aacctgtgta tgccattttc agtgtctcgt 360
ctgatgcgtc atctaagggt gttctagagt gtagttcttg ctggacttga tttgggtcttg 420
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<210> 727

<211> 311

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-F8

<400> 727

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 caactgcctc atcagcgtcc tgctgaactt aactggccg gggttgtact gtcgggattc 180
 agtcatgcac ccggatcacc gggctcttggc cagcagctgg gagcactggg aagcggccct 240
 ccacgcggag catgggaccc atcccaaggc catgatcaac actttctggg tgagttctct 300
 tcagaagcac a 311

<210> 728
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-F9

<400> 728
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 gagcagcaga atgccaagg tgcatatagt tctacagaag aggtgaagga ggaagtaaag 120
 tgcatcaaag ccattataga gaggtgata cagaggggaag gccatcttgt agtcatagac 180
 gaaggaacag cggcagcaga aggtgctgca gcaagggcat cggagcacag aatcctggct 240
 gttaaccgga actacgtcat tgattgatta accagctgag gacacagcta actagatcca 300
 tcatatgtgg ttgaccaata gagcagacat tcaaacggaa gacatcctgt tgtcatatgc 360
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 ttgtatcttc cat 433

<210> 729
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-G1

<400> 729
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 atatgggatc accctggaac gacgtccgca gtgtagaccg gagggcaaag cctgtagcac 180

caagaatcgc tgaccaatag aaaatactgt ttgatattatt attaatatgc acatcgcgaa 240
 taacttacaa cgattgcacc tggatatttat ctgacgacgt ccatactgat ggcagacgag 300
 atgattatgg atgagggaca tcttggccag agtgcctcaa gactgcatcg ggccgaccaa 360
 catacggaac ggccgatctg atgcataggt cggctggccg aggtgatgtc aggatattgt 420
 tac 423

<210> 730
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-G10
 <400> 730

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 ggtactccct atagtacata ctacagtact atgccctagc ttgctagagt agagtagtag 180
 agtaggactc tgctctacta ctagcaccgg aggagtagta tattctaatac taaaatagtt 240
 acaaacttcg atgcccgatc gtggaacgac tacaaccat gctcaaagac cgtgtctatg 300
 tgggtgtttgg acttatatgc aaaaaaatag caagatgccc gtgcattgca cgacacatca 360
 tcatacaciaa ctcggttttt tctctactcc tactcctata aaacactc 408

<210> 731
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-G5
 <400> 731

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 ggatgacacc atggaagagg agcatggcaa ggaggatgct gaagatgggtg gtgatgaggg 120
 gatggagcag gaggaaggga gtgacggcga tgaagacgat ttcccgcatg ccttcttctt 180
 tgtgaggtat ctgtgtgatc gggaggactg ctatggcatg cttgogccgt tgccaccctt 240
 accgaacggt gagctgtccc atgtatttga gtgcaatgcc tgtgggcaac tgaagaagga 300

agaagacgag gttgaggctg atgctgatgc tggtgattgc agcatggacc agtaggatgt 360
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 tactttgggg gctgtttgc 439

<210> 732
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-G6
 <400> 732

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 atacctacct atcatggcat ttccatagcc attccgagat atattgccat gcaacttacc 120
 accgttccgt ttattatgac acgctccatc attgtcatat tgctttgcat gatcatgtaa 180
 ttgacatcgt atttgtggca aagccacctt tcatgatttt ttatacatgt cactcttgat 240
 tcattgcata tcccgggtaca ccgccggagg cattcacata gagtcatatt ttgttctaag 300
 tattgagttg taattcttga gttgtaagta ataaaagtgt gatgaccatc attattagag 360
 cattgtccca tgtgaggaaa ggatgatgga gactatgatt cccccacaag tcgggatgag 420
 attccgggct 430

<210> 733
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-017-Q1-E1-G7
 <400> 733

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 caaatcaaat caaaataatt gcaaacaaaa ctccccggg actgttggtta gttggaggca 120
 ctggttgttt cgagcaagcc atggattgat gcttggttgg gcagggggag tataaacttt 180
 atcattctgt ttgggaaccg cctataatgt gtgtagcacg gaagatatcg ccatctcttg 240
 gttgttatgt tgacaatgaa attatgccgc tcaaaatatt atttatctct atttcaaaat 300
 cgagcgctgg cacctctaca aatccctact tccctctgcy aatggcctat ctatttactt 360

ttatgttgag tcatcaccat cttattaaaa agcaccagtt ggagagcacc gctgtcattt 420
gcatccattg ctattaattt atattgggta tg 452

<210> 734
<211> 320
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-G8

<400> 734

gtccagaact cccgggtcga cgggttatgc tagttgtatc gtcaccaag gcatgacatg 60
acagttgacg tgctgctgct gctagtctgt atccaacgcc aatttgtgac atgtctgtaa 120
aattctgcat cataacttaat cggattttgtg agagacggga taggcgaatg cttgttcaaa 180
ttactgtggg agacatcgca ctttgtgtct tcattgcagt acattatttg tcacagattg 240
cactcttgat tcagtgccta tcccgggtcaa gtcgggtgg ctctctaata cagtcataat 300
ctgtgtgtag gtattgagtt 320

<210> 735
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-017-Q1-E1-G9

<400> 735

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agctgccacc aaatacacia ggagacgatg atccacaagg cagtgcataa ggcgtgatta 180
acgtgcatac attttgaatg gaatggcctc cttttagtgt tttgtgggta gtagactttc 240
tatgggtctga tttcacaatg tcgggggtggg taaaatacta ttgtctagtc aaacatcatg 300
catgcgaatt ggtcttaaaa cactgtaacc acaagatgat ggataccatt tgccggccgtg 360
gcattgatgt gcgccagttt ccacaagtca tgtattttcc tgaataaaac agaaaaaaaa 420
aaaaaggaag caaaa 435

<210> 736

<211> 238
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-017-Q1-E1-H4

 <400> 736

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 gttgatgcat ttgtcgtctt ggataataact aaagtatggg tctctgagta tggatgagat 120
 tagtctagca ataactaata gcataccagg ggaacactct gctagcctta caaccattaa 180
 aagacttgag cgacatcatt tggacacgag tgtgatggct agccatctcg accttctc 238

<210> 737
 <211> 391
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-017-Q1-E1-H6

 <400> 737

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 agttggtgca aacttcaactg gtgcatccaa accccatgat acaatacgct ctatcacaca 180
 taaacctcct tatatcttcc tcaaagcagc caccatacct acctacgatg gcatttccat 240
 agccattccg agatatattg ccatgcaact ttccaccgtt ctgttcatca tcatgacaca 300
 catcgtcatt gtcattattgc cttgcatgat cgtgtagttg acatcgtatc tgtggcaaat 360
 ccaccatgca taaattttca tacatgtcac t 391

<210> 738
 <211> 441
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-017-Q1-E1-H7

 <400> 738

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 gaagaacttg ctcaagggtt ggtgatgtgc cagatcaaac tcccacaatt tgaaggcccg 120

ttgttggcat gggacgatcc ggcggatgag catgacctgg actacgttga cgagcttgat 180
 attcttgttc actagctttt ggacgcaggc ttgaagtctg gtcagctctt ccaaactctcc 240
 ccacattagg cccgtctctt tccaggaggt gagccgtgtg gggaaaccag atcagaattc 300
 aggggcccgc gcccatattg ggtcacgcgg ctcggtgatg tagaaccacc ccgactgcc 360
 cccctttatt gtctccacaa aggagccctt gagccatagg acgttggcca tccggccac 420
 catggcacct ccgcactccg c 441

<210> 739
 <211> 381
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-A11

<400> 739
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 agtggcctaa gcaggacaaa aagaggatgc tgcattgctgt ttaccgtgtg ggagatctcg 180
 accgcaccat taagtgttac acagaatgct ttgggatgaa gctgctgagg aaaagagatg 240
 tcccagaaga gaagtacacc aatgccttcc ttggatatgg acctgaggat actaattttg 300
 cacttgagct gacttacaat tatggtgttg acaagtacga cattggagct ggctttggac 360
 attttgccat cgcaaatgaa g 381

<210> 740
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-A12

<400> 740
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 tatgcagttt gaccgataaa gatcttcgta gaatatgtag gatccaatat gagcatccag 180
 gttccgctat tggttattga ccggagatgt gtctcgggtca tgtctacata gttctcgaac 240

aacgacatga gtcccgtaa ggaacttgcc ct

392

<210> 743

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-A6

<400> 743

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cacacagctg aagaagctga tgaacgctta ctgcgaccgt cagtctgtgg atctcaactc 120
cattgctttc ctttttgatg gtcgtaggct ccgtaggtgag cagaccctg atgagcttga 180
gatggaggaa ggcgacgaga tcgacgccat gttcaccag accggagggt gctttcctgg 240
cccttagaag gagcttgctg cagcctggct gttctatgtc gtatgtacc tttagaacta 300
gagtaaaatg taagaagtga aagaacttgt gaggctatgg ttctgtgcca tagcctgagg 360
gggggtctgg aggtgaaaca acatcgaggt actgttgatg tcgtgactga acta 414

<210> 744

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-A8

<400> 744

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aggctgaaa taaactactc acacatcacc ggagaggcca tggagttgat gtagaggccc 120
tccgtgatca atgccccctc cggcggagct ccggaaaaag cccaagatg ggatctctta 180
ggtaaaaaag gttgcggccg tggaattagg tttctgtggt tctcctggat gtttgggggt 240
acgtggatat atataggagg aagtacatcg gtggagcaac gaggggcca cgagggtgga 300
cagcacgcc aggggggtag ggcaccccc tgccttgtgg cctcctcgat tgtttcttga 360
cgcccactcc aagtctctg gatcacattt gttgtgaaaa t 401

<210> 745

<211> 441

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-B10
 <400> 745

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 aagcaatgtc gcaagtgagg taatcttcac acaacccatg taatacatca gggaaagaga 180
 tacatagttg gcttacaatc gccacttcac acaattacat gaataaagca ttacatcatc 240
 cagatacaat caaagtccga ctacggaacc aaaataaagg aagaacccca atgcgacaa 300
 ggtccccgat tgaccccaac tgggttccac tactgatcaa ctagaatgaa aaacaacaca 360
 aaggacaaga tcttcatcga gctcctcctg agcttggttg cttcatctgc acggtctcat 420
 cggcacctgc aaactggttt t 441

<210> 746
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-B12
 <400> 746

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 gtgggggtttc gcggctggag cggagagggt atggtagcct gggatttcga atggcgaaaa 120
 gggggcgatg ggagggggtg aagcatgact ttggaacgtg cttgtccaaa atgtagggtg 180
 tgttacaaaa gtaccccccc accgatttga actagcggcc ctttcgggtc aggggtagaa 240
 gggggattta gcgtgtcagg atttggcagc tggagggagt tttcgcgcat gttgtaattt 300
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<210> 747
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-B6

<400> 747

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agcgggctgt tgagtattta tattctggta ttcctgagcc gatggagatt cctgcaccac 180
caccaagtgc ccagccagct gatcctgccc aggtttcaca agcagctcaa cctgcagttg 240
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cagcaaattg tgctgggtgaa ggaaattctg atgttctacg aaacaatgca cagttccgaa 360
gcttactttc tttagtgcag gccaacctc aaatcttaca gccattgcct caagagctgg 420
g 421

<210> 748

<211> 412

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-B8

<400> 748

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acatacaata agtactcatc taattcacag gtaaaactca aatagaagat cgaaccagaa 180
agttcaactt aagaactccg gtttgcaaaa aaaaacaaaa caaatgaagc tacggaagtc 240
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gcaaaaactt gtttaagttg gttattcgga aagagggtt cgagacgaaa ctccacacgc 360
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<210> 749

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-B9

<400> 749

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 atcgaacacc tcatgtgcat aggaggtgag atagagcacc acaaaccctt cccctcgccg 180
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 ccgccccctt gggctc 436

<210> 750
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-C10
 <400> 750

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 gagcaggacc gggtaccaga gcatgtagaa ggagtagcgt 400

<210> 751
 <211> 360
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-C12
 <400> 751

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gagctgagac ccaagtggca ttactgatgc tgcggttgcc aaatgcctat ttttggcttc 180
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 tgtttcttgg atgatcttat agggatgaat tcatagttct agcttaggat cagctgatga 300
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<210> 752
 <211> 412
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-C4
 <400> 752

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 gtaggagcaa gtaaaagtaa gtacaatagt gcgttttaca tggcattttt gcatatgtgg 240
 aggaaagaga ggcaaggaaa aagtggagaa gtgggatctc atgcaagagc cagcctctac 300
 tacatggtgg agcattggga gactcacgcc ggctgtagcg ccgcaggtta aatgataatg 360
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<210> 753
 <211> 255
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-C5
 <400> 753

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 cagaagaaga tgaggagaaa accgcattca ttactccatg tggcacatac tgctttgtac 120
 ggatgccttt cggactaaag aatgctggtt caccatttgc aagggtagtt cacgaagctt 180
 ttgaaccaca gttgcacaga gatgtataag cttacatgga ttacatactg gtcaacagca 240
 cagatagacc aactc 255

<210> 754
 <211> 250
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-C6

<400> 754

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 tggttggcct ctagcAAAA cttgctgttc ccggcggttc tggactcgtt gaaagcaacg 180
 ttggccttga aaccctccag ccgcctgtgc tttctcggca gcgtcacctg acacgcggcc 240
 atacttgccc 250

<210> 755
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-C9

<400> 755

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 actccaccac tgggtggtttt gaggtgtgta tctccaagga tggccagacc cgtgagcatg 360
 ctctccttgc tttcactctt ggtgtgaaac agatgatctg ctgctgtaac aagatggatg 420
 cca 423

<210> 756
 <211> 363
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-D1

<400> 756

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ccgcagcgcg cgatgaacac cgacatcacc gcgtcgggtga agccggagta cccggtgggtg 180
gaccggaacc ccgccttcac caaagtcgtc cccaacttct ccacgctcga ctacctccgc 240
ctctccacca tctccgccgt ctccgtcacc gtcgggtacc tctccgggat taacccggga 300
ttcgcggccg tcgatgggtga cggggggcct catcggcgtc ttgggaggtt catgtacgcc 360
tac 363

<210> 757
<211> 358
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-018-Q1-E1-D10
<400> 757

attactacac cctatagtga gtcgtattaa aacgcatgga ctggtgggta tatagctggg 60
acaagcattg gcacattggc atcaaacagg attctcaaag aagagcaagc ctgtttgcaa 120
ctacaaggat cttaaggaca tgtatgaaat catgagaagg agggtagtga gtcaaggatt 180
cctagttctt actggctgac aaactttggt aaaacttctg agagtataaa gttggggtcag 240
ctattttgga acggagtgag tagtcaagaa tattgtagct aaaagtagca ggcaggagat 300
aaccaagttt cacattgact taactgggtat cgtcgtcttg tagcgataac tttgctgt 358

<210> 758
<211> 404
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-018-Q1-E1-D12
<400> 758

tgggacaccc tatagtgagt cgtattaagg gttcatggag aagaacacaa tagagttcat 60
gagggagctg tggagcctcc ttctcagtgc gcagcagaat gctagtgggtg tgccccagca 120
atTTTTggat gcaaaggagg ctgagattca gcagagaaag gcggaagagg ctagaattgc 180
ccaggaaatc cagaagaagc gagagaatag atggaatgga cacggaacta gataaacgca 240

aaatgatggc cggggatact ggtaattcaa gatttcatgg tgattcactt ggctctgcgt 300
 taaacaatcc cagtgtctat gctgataaag aagaggagct ggacttgaag catagctcga 360
 gaacaaagag ccggaagat cgaacaccta ggagcacatc tttg 404

<210> 759
 <211> 384
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-D5
 <400> 759

cgcgctggtc attgcgactc cctatagtga gtcgtattat ggggcctttt ccggagctct 60
 gccgaagggg caacgatcac agagggcctc tacatcaact ccatggcctc tccggtgatg 120
 tgtgagtagt ttactttaga ccttcgggctc catagttatt agctagatgg cttcttctct 180
 ctctttgaat ctcaatacaa agttctcctt gatcttcttg gagatctatt cgatgtaact 240
 ctttttgagg tgtgtttgtc gagatccgat gaattgtggg tttatgatca agtctatcta 300
 tgaacaatat ttgattcttc gctgaaatcg tttatgcatg agtggttatc tttgcaagtc 360
 tctttgaatt accagtttgg tttg 384

<210> 760
 <211> 394
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-018-Q1-E1-D6
 <400> 760

cattgctaca ccctatagtg agtcgtatta tcgccatgtg attaacaccc aaagagtact 60
 aacgtgtgat catgttttgc ttgtgagaga agtttagtca acgggtctgc catattcagg 120
 ctcatctctg ttgagagcag gatccaccgt cttgccggtt actacaagcg caccaagaag 180
 ctcccgccca cctggaagta cgagtctacc actgccagca ctctggtggc ttaggagggc 240
 tcttcatctg gtgtgctctt accggcttca ggatggtctt gttctacata ttatcaattt 300
 catgtaacgc ttttgagttt ggagcgattt agatgaacac gagaccaaatt tttctaggtt 360
 tacctggaga atctcataaa ccatttttgg tttt 394

<210> 761
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-D9

<400> 761

ctcccggtc gatggggatc tcgagaatga atcctactag tggaagaaac agaagaagga 60
gaagctaaag aaacggagca agtacaaacc gtcgaacaag gcatcctcca aaaccaaag 120
gaaacccac cctaagaaga aagcaaaaca ttaatcaagg tagagctagg gctcggcaaa 180
ggctgttgac gaagtgtat gctttcagtc atgagaaaca cctgcctgtc acgggaaatt 240
ttgtttaagt tgagaattac aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaa aaaaaaaaaa aattaaaaaa aaaaaaaaaa aaaaaaaaaa aaagcggccg 360
cccaaagga tccaacctta cttacgcttg aatgcaactt catacccctt caaaagtgtc 420
acctaaat 428

<210> 762
<211> 282
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-E10

<400> 762

attacaacac cctatagtga gtcgtattaa gtatccttga cgacattact gattgtaaac 60
tgcaaaactc tgactggata tgcacaagct cctcttgagc cattggcgtc tgaaaggagt 120
cggcacctga taagtctgga gtctcttagc atggagggtc gccaaagttc actagagatg 180
tacaacgtag cggcaactct caagaatagt acgattgatg ggtgaatgaa gcctgaatcc 240
acatttgga agatgcatgg catggcacag tgagtcggag tc 282

<210> 763
<211> 327
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-E12

<400> 763

atagtgagtc gtattatgaa ggctatgttg atttgtttca actacatgcg tgaacatgtg 60
ccaagtcgag tcaactcaatt cattcaaagg aggataccat cccatcatag gacatcataa 120
tcattctaata agcatgttgg cagcgaaggt aaaccattat aactcatagc taatcaagca 180
tggcacaagc aactataatc tctaaatgtc attgcaaata cgtttacttc ataataagcc 240
gaatcagaaa cgatgaactc atcatagtta caaaagcaag agacttcgag ttcataaccag 300
cttttctcat cccaataagt ccatcat 327

<210> 764

<211> 190

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-E4

<400> 764

ttgtactcc ctaaagtgag tcgtattaaa tgatggaggc ttacgtgcgt aatgcatgcg 60
acgccctaga tgatctaaac tgacgtatgc gttcaagctg acttcataatc tcgttctaga 120
gtgtcacgag ggggtgcaaat catgggccgt ccatttataa cgtcgttact gggaaaagcc 180
tgtcgttacc 190

<210> 765

<211> 338

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-E5

<400> 765

ccctaaaatg agtcgtatta agagcagccg tcttgtctgg gagacatgtc tcagtgaagt 60
caagtcactt ggcaaagtgg ccgtcaggct catcttcctc catgcaaccg ccaagggggt 120
caaatgcacg ccgtcgatga cgcgggtggc caccgcgccg gggagctcag ccggcagcat 180
cggccggggc caccggctgg tgttcacgc gcgaattca aagctgcaga ggagggattt 240
ctcaaacgac gaccacaagg acgtggagct gcttgacaga acgcgacgaa gacatgctac 300
acgagactgg caatgtggat tccccaccct cctcagt 338

<210> 766
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-E9

<400> 766

caatactaca ccctatagtg agtcgtatta attcggacac gatggtgaat ggcaatcgcg 60
 ggacagatgg ggaaaagcca cgtcaacctg atgcaaagga gatgctgga acaaatccaa 120
 caaaacttca tcacaccaac aaatcacatg acacggattg gggctatttt tggcggggat 180
 tttcggattt aggacgaaca caccacaatc aatctagaaa acacggggta cgggctccat 240
 aaacgtgatc accgtggctc aagataccaa catgatgtag ggcggaaccc taggggccga 300
 tctttcacat ttggaatgga tcctacaggg gaaacacgaa taacgcgcga aaaacacaaa 360
 gggaaacacg gcgagatata gtacgatcac ttgactgacc aggaatcaat caca 414

<210> 767
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-F12

<400> 767

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 tctttttctt ctgatcaata gacaaattgt ccaggacttc ctattttggt aggattttta 180
 gagttccaga agtttgcgtt agttacagat tgctacagac tgttctgttt ttgacagatt 240
 ctgtttttcg tgtgttggtt gcttattttg atgcatctat ggatagtaaa atagtttata 300
 aaccatagag aagttggaat acagtaggtt taacacacaaa atacataaag aatgagttca 360
 ttacagtacc ttaggtggtg gttttgtttt ctttcactaa cggagc 406

<210> 768
 <211> 202
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-F6

<400> 768

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acactcataa acgcattagt cccttaacct ataagtcttc aatacaccaa aatcactaag 120
gggcactaga tgcacttaaa atctccccct ttttggagat tgatgacaat atgggtaatt 180
tttacagggg agataaacat at 202

<210> 769

<211> 277

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-F9

<400> 769

attacaacac cctatagtga gtcgtattat gggctgatag atcgtgggag tcagaacaac 60
tgctgattg gaggcgatga tctcaagagt gggcagacta ggataaattc cgtctgggcg 120
gagatgcatg tgggcgctgg atgcaagctc aggcgacttg gcagcgctga taacctgggg 180
aagtacgatg ggggtgggtct gtaggcgcat cagctgtcca gtggcggggg tatgtccagc 240
agtgcgctg cggaggacac ggacgcaagc accggag 277

<210> 770

<211> 369

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-G1

<400> 770

acgacaccct aaagtgagtc gtattacatg ttctaagcct aacaaatatg tatgacagta 60
tggtcatgt ccacatagga cgcctcttg agtatagact agccaatgct cacaaggatt 120
actccacaaa ataccgttac cgatctatct gatccaggct aacctagtcc tgctatctac 180
ctgactacct ctctgtgaca gtcaccgagt tacacttcac tggacgtcgt ttacattgt 240
cattatcgtg acaaccttgt tgttaccaga ctatccgcac ttcaacacat cgtcatttct 300
caaactaggc attgctctat aatggcagca ccgatcacc ttctcaatag ttcaccagcc 360

tgaattgcc

369

<210> 771
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-G10

<400> 771

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tttagaattt ttggggttcc agatcttgcg ctagatacag attactacag actgttctgt 120
ttttgacaga ttctgttttt cgtgtgttga ttgcttattt tgatgaatct atggctagta 180
atagtatata aaccatagag aagttggaat acagtagttt taacaccaat ataaataaat 240
aattagttca ttacagtacc ttgaagtggc cttttgtttt ctttcgctaa cggagctcac 300
aagattttct actttaagtt ttgtgttggt aagttttcaa gttttgggta aagatttgat 360
ggattatgga acaacgagtg gcaagagcct aaacttgggg atttctcatg ggaccccc 418

<210> 772
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-G12

<400> 772

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ggatatttgct atggttataa aattggctct agaatgatgg gcatccaagt tgggtataat 120
aaaaactatc atagaaagtg aattggatgc tatgaccaat ttgatacttg ataattgttt 180
tgagatatgg ggatggatgat attaaagtca tgctagatgg gtgataaaga atttaaataa 240
tacttggtgt gaagtttggt attcccgtag catgcacgta tgggtgaaccg ctttgtgatg 300
aagttggagc acaattttat ttactgattg tcttccttat gagtgcgggt cggggacgag 360
cgatgggtatt ttcctaccaa tctatcccc taggagcatg cacg 404

<210> 773
<211> 352

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-018-Q1-E1-G3

 <400> 773

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 ggactggatc cggaaagga gcgctcgtaa tgtaaaacca cttcgaagtc gagttatctg 120
 gtgccttctt gggagtaccg gatatgtatc cggtctcagc gatatgccat acttcgggtct 180
 cgcccacttg acatatggat tctcactggg tgcaggggac aatgcagaat agcttcttcc 240
 atagtccgaa atgagcctcg cagcctagaa atagctcgca aatggcgacg taccctgcta 300
 tatgcagtaa ggacgctggg gtaaagttgt gcaactggag gtcgtagaac tc 352

<210> 774
 <211> 387
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-018-Q1-E1-G6

 <400> 774

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 gccaaagcagt acgccgagga gtatcatgcc caggacaagg agttgggttca gcttaaccgt 120
 gagggccgga tgaaggggtg gttctatgcc agtcctgacg ctacgctgct gtttgttgct 180
 ataatcatag gtatcaatgc catgcagcca tggaccaaga acatcttgca gctggttgcgt 240
 ctgacacaga tattcactgg agtggtcccg aagggttaaca aggccaccat caacatgctc 300
 tgcagggctg agccatatgt tgcatatggg taccgaacc tgaaaagtct gagggagctg 360
 atgtacaaga gaggttacgg aaagctc 387

<210> 775
 <211> 379
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-018-Q1-E1-G7

 <400> 775

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tttgataact tctagatttt tgcaataagt atatgatttc tttaaaacta atgtacagtc 120
catggattat acgcactctc acccttccac ctttgctagc ctctctaaat atcgcgacc 180
tttcgccggt atcatacacc taccatatat cttcctcaaa gcagcgagca taccaaccta 240
ttacggcatt tccatagcca ttctgagata tattgccatg caactttcca ccatctagtt 300
catcatgaca cattcatcat tgtcatattg cgtagcatga tgatgtagtt gagatagtat 360
ttgtggcaaa gccactgct 379

<210> 776
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-018-Q1-E1-H11
<400> 776

ccgggtcgac gggcaaacgt acatgctacg ggaatcacia actttaacac aagtatttct 60
caaattcaaa actactcaac tagcatgact ctaatatcac catcttcata tctcaaaaca 120
attatcaagc atcatacttc tcatagtatt caacacactc ataagataat ttttactaat 180
cttggatgcc tattataatt aaagaaaatt accacactgt tttgtaggac tctcaaaata 240
atataagtga agcatgagag aacaatagtt tctataaaac aaatccacca cctgtgtcta 300
aaagatataa gtgaagcact agagcaaaaa ctatatagct caaaagatat aagcgaagca 360
catagagtat tctaataaat tctgaatcat gcgtgtctct ctcaaaagggt gtgtacaaca 420
aggatgattg tggcaaac 438

<210> 777
<211> 231
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-018-Q1-E1-H3
<400> 777

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gatgaatctt gtatgcatat tgcagattcc atgtcttcat gcatgttgct tcacgcgcat 120
tggataattt cgcaggctca gaggatcggg atttacgtat gcgtacatgt aacgtcatat 180

ctctgctata tggtcaccta gattcaattc actgtgcgctc actgaatacc a 231

<210> 778
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-H6

<400> 778

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ccacttcttc gacatgcacg aacactcgat acaggtagat ccctaactgt gtccgcggcg 120
gccttgggtg cgacaaatag tacaaccccg gttcctggac cggtagtctca acaccaatca 180
ccttcggtat ggttgacggc ttcttcatcc atgccataac cgtcagagcc cagctgtctg 240
gaggaacaaa catacttacg agctcacatc caaggtcctt gataagctca ttcattggact 300
cgttggtcca agcatgtcga ggcattgctgt ggaaggtaag ctttggttaa aactcaagct 360
cagagggcac cgagcccat cctgggtgct cactagcgag ccattcgtaga acaaacgccg 420
ggaagattcg aacaca 436

<210> 779
<211> 194
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-H7

<400> 779

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tctggcttat tacaggactt gttcctgttt cggtagtcga atgcaaatca ccttcgttaa 180
gggatgacgg gatc 194

<210> 780
<211> 405
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-018-Q1-E1-H8

<400> 780

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ttcattttaa ttcgagaata atgggtgttc tatttatacg agtaacatat tttatgggtca 120
tggaccaaat gtcaatgggt taccattgtg tgtgtgctgt tgtctaggag cacctgtgaa 180
gagccatgta ggcaggggaag gaagaggtgg tcatcgtgtg gcttcacacg tctggcatga 240
gcgccttacg tacacacgtg aggaggatcg tgacagaggg cctgcagtgg tgggctctgc 300
cagctttgtg tgggtctgcac atgttngtgg ccatgtaagt gacccatgta agcgttctct 360
ctctcttttc taaactcgct cagttttcta atttctgtaa ttgtg 405

<210> 781

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-018-Q1-E1-H9

<400> 781

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ttctacttct gttcttctcc gcagttttta tgtaggcata actccttgga atagatgtgt 180
tcttgatact gttgccggag gtgatttctt gagtagccat gcgtttgatg cttataatgc 240
tatgttagat ttgtttggcc caccacctct ttgggttaat ggaacgggtt taactttaga 300
acatgtgatg caacggcttg atattattga aaataaaatg gccactattg agttgattga 360
caatttggat aaaaagattc ataatacat tacccaatat ggatctaggg ttggagttac 420
tttgaaaaat cttaaa 436

<210> 782

<211> 449

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-019-Q1-E1-A10

<400> 782

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 ggccttcacc ggaacaactt ggtgacttca cccgataaaa aggcgcggaa aacccttaag 120
 ccttaacgga caaggtaatg gaccacaatt tccaaaaagg gttaaaaacc gtgacaattg 180
 aatcatacaa tggaacgaca gatcccacaa tatggatcaa aaattccctt ctccacatca 240
 acatggctca gggcgatgat ctccatgcaa tcaagtacct cccctaaaa ctcaagggac 300
 cagcacggca ctggttaaac agcctcccag aaaactctat tggtagttgg gaagatttgg 360
 gagatgcctt tggagacaac ttccaaggta cctatgttcg gcctccagac gccgatgacc 420
 ttagtcacat agtccaaaaa cccgaagag 449

<210> 783
 <211> 314
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-A2
 <400> 783

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 aagcgaagac caaggccagg gaaaggctta tcgcaaagga ggctgcgcag cggatgaact 120
 aagtttagca ttgttgaacc atatctattc ctcatccttg agtagtgtgc aagcatactg 180
 tggcagtttg gctccagttt tgaaagtcac ttttgtttgt ctgaaacatc ttggaaagaa 240
 cagtgtgaaga atgaagtatt tctgtttaat gccagttagt attttaaaaa aaaaaaaaaa 300
 aaaataaaaa ataa 314

<210> 784
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-A4
 <400> 784

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gtgtacgagt tcatgagcaa cggctcgggtg gccgacctgc tcttcagggg tgcctcaacg 180
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 cagcagcagc ttagcagccg cgtgaccac tgtgacgtca agccgcagaa catcctcata 300
 gacgcagccg gcacggccaa gatcgccgac ttcaggcttg ccaaactgct ccaacctaata 360
 cagacacgca cttttcacgg tgtccgccc acgcgtgggt acctgggccc cgagtggtag 420
 aggggcacgg gccctg 436

<210> 785
 <211> 420
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-A6

<400> 785
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 aagagaataa ggagccaacg gtgatctccg tgggtgctgaa ggtgcacatg cactgcgagg 180
 cctgcgcccc ggcgataaag aagaggatcg aaaagatgaa aggagtgcaa tctgcagacc 240
 cagacctgaa ggcgtcggaa gtgacgggtga agggcgtgtt tgaggagggtc aagctggccg 300
 agtacgtgca caagcgcacc ggcaggcatg cggccattat caagtccgag ccggtcgccc 360
 cggccgagaa agccggcgaa ggcgacgcca aggatgagaa gaaggcagcc gaaggcggcg 420

<210> 786
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-A8

<400> 786
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 gggcaagagg ggttcggggg taaaagcac agagccgtgc ctggcccgtt taaccaggc 120
 cgtgccgtgc cgtgccgggc cgggcccggc catttgacca ggtttgattg tgtatccgcc 180
 tcgcattttc tgatttttac caatttatta atagtagcaa aaatgcccgt gcgtggaagt 240

attggacata tagtttattg catggttact tatatttgta tcatgatatt tatttattta 300
 actaacacat catgtttttc aatttgtctt caaatcaccg gtgagattta catatgtatc 360
 cactaatgca tcatgtgttt catcagttta tcttgtctgc atgacaccct cattcaac 418

<210> 787
 <211> 387
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-A9
 <400> 787

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 aaaaaggacc ttaaccgtgt tgcgggggtg tcataaggag cctatccatc tcaactagaa 120
 ttatcccaag tttcacttca catcgtgatg ttgttttacc tttttcctgt cattgtcctg 180
 ctataacgga tagcgtctcc tgttgggcgc gccgccggcg gggatgccct agtgggtggag 240
 ggtgtaagtc ctcttccgcy ggggtgccct gcttgtaacct agatgggttac tctttccgtc 300
 cattgtcacc ggctaacatt gtgataatat caatctgggt aatgttagat taagctgttg 360
 tcctacaaaa aaaaaaaaaa aggggcc 387

<210> 788
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-B10
 <400> 788

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 aaacctgtt gttggtttgc ccgtcaacaa gcactgtgga aggctcgaag gcaaagggtca 180
 caccaatggt catagggatg tgaatgtgtt acgctcgggc caacaaaacg accttgatan 240
 ggcaaactta gtagtgctac aacacctaga tgtgctagaa gatttcatga cactgcacaa 300
 agagaccatc gcaaagaagt accgtgaccg tggggtgcac aggacggacg cttaagttat 360
 tagagagcac aactccactt tcttgttttg gttcaaagag cgagttctgg ctaatcccc 420

ggaagaaggt tgtccaaa

438

<210> 789
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-B2

<400> 789

ggtctagaat tcacgggtcg acggcggaata ctctatgtgc ttcacttata tcttttgagc 60
tatatagttt ttgctctagt gcttcactta tatcttttag agcacggtgg tggttttggt 120
ttatagaaac tatttttctc tcataattca cttatatcat tttgagagtc ccacaaaaca 180
acatggtaat tttcttaagt tgtgaaatta gtcctaatat gataggcatc caagattagt 240
aaaaactttc ttataagagc gtttgaatac taagagaagt ttgatgcttg atgattgttt 300
tgagatatga agatggtgat attagagaaa tgctagtga gtagttgtga atttgagaaa 360
tacttgttct aaagtttggtg attcccgtag catgcacgta tggngaaccg ttatgtgatg 420
aagtcggagc atgat 435

<210> 790
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-B6

<400> 790

ggtcaggaat tccccgggccc acgggggagga gtacgagtac caggccgagg ttagccgcct 60
gatggatttg attgttcaca gcctctacag ccacaaggaa gtgttccttc gggagcttgt 120
gagtaatgag agtgatgcct tggataagct gagatttctc agtgtaactg atccatccgt 180
gctggctgat ggtggtgaca tggaaataag gattaaacct gaccctgatg ctggcacaat 240
aactatcact gatagtggca ttgggatgac aaaggatgag ctcaaggact gccttggaaac 300
tatcgacaaa agtgggtacct ccaaattttt gaaggctctg aaggagaaca aggagcttgg 360
tgcagataat ggacttattg gtcaatttgg tgttggattt tattcggctt ttcttgttgc 420
agag 424

<210> 791
 <211> 363
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-B7

<400> 791

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 tggtcgaggc cttgatcatg gtgatatgtg tttattcgtc cgggtggctca gtagaacgat 120
 aacctctgtg cacagtgatg tttcagtttc tacattgatg gtttcaagca taagaagggtt 180
 tcaaaaattaa atgagccttg tacaggactg ataacaaatt atgctttctg agtttcaagc 240
 tactgaaagt aattgaagct ttgccttcgc tatgtaagaa tggttgcatg tgttaattag 300
 tggtgacacat tttttgagac tgtccaaaat tctattataa aatgcttata tgaaattgat 360
 ggg 363

<210> 792
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-B8

<400> 792

taacggtcta gaattccccg gccgacggga gattaaaatg atggaaaata gacccggggg 60
 ccataggttt cactagtggc ttctctcaag agcataagta ttacggcggg taaacgaatt 120
 actgtcgagc aattgataga attgagcata gttatgagaa tatctaggta tgatcatgta 180
 tataggcatc acgtccgtga caagtagacc gactcctgcc tgcactact actattactg 240
 cacacatcga ccgctatcca gcatgcatct agagtattaa gttcataaga acggagtaac 300
 gctttaagca agatgacatg atgtagagg ataaactcat gcaatatgat ataaaccca 360
 tctttttatc ctgatggca acaatacaat acgtgtcgtt tcccctgctg tcaactgggat 420
 cgagcaccac aagattgaac 440

<210> 793
 <211> 440

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-C10
 <400> 793

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 ccaccaccaa accattttta accagaatga ccaaaacacc tggaaccagg ggtcaaattgc 120
 ccctccggca aaaacttgca catgaggaca accttaattc acttcttcaa gttgataaaa 180
 tgggtccaatc taatggcgca gcacacagct cacatatgaa ggaagagcct cgaagctaata 240
 gcgtggcatg caccgaaatt gttaaggcca gatagatggc ttcagctatt ttccttcggt 300
 tccatagcgg tgctgctagg aatccctaca tgatgttata ctgatggagc gccatgaaca 360
 gttgccgtac atccttgaga tcattttctta cccttcacgc tgaagctcgg gaaagcgtgt 420
 ttggaaggaa cagattctgc 440

<210> 794
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-C2
 <400> 794

attcacgggt cgacggctat agcagttgat ataacagcca attgcaaaga taattcaata 60
 agtgtcaact taatcaaata aagtcacga tataaagaaa gagggataac actaacaacg 120
 ggtccaagat tacataaagc aattttaaca aaatttcctt taatggagca agggaaaatg 180
 ggtaatcctc gaaaaccaag tttccttggg aatccaaccc taaaagttaa atagcagcat 240
 ggggaaacca actcggaac ttctttaata tacaatacct tcaaaaacta ggcataagga 300
 tttattttga gcatatcaag ttaaccgcat acgcaaaaag ataggtcaaa tcatttaagc 360
 aaagcgctca aaatcctcat catccttttt cttggatggt ttggggggga a 411

<210> 795
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-C3

<400> 795

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tgtccaatca agaatttcca tgcaagagac aaagagttca cctatcgccc aggcgttacc 120
tattatgctt gtggagaaga agggcactat gccaaagcagt gcccgaagcc aaggaactca 180
accccggaagc ccaataatgg tggaataaat tcagcgccaa agcgaagcaa tttcaacccc 240
aataacaacc atcggaaagg tcacctgaac catgtgaccc atgaggaagc acagaacgcc 300
ctagatatcg tgctcggtac gtaccccgtc aacacaatac ctgccatggt tttgtttgat 360
tctggagctt ctcactcatt catttcgaag agttttgctt tgcaaaaataa tttttcgatg 420
c 421

<210> 796

<211> 55

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-C4

<400> 796

tacgtaagct tggaaccgct aaagcggccg ctcgacagga tccaagctta cgtac 55

<210> 797

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-C5

<400> 797

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catcagcaat tttacttatt agagcacctc cgcacgctgc gtactgcccc tcgaccatct 120
tcggcttcac atcgaaggctc ttgagccaca ggccgaagtg aggggtaatg cggaggaagg 180
cctcacaac gacaataaat gacgagatgt gaagaaggga atccggggcc agatcgtgaa 240
aatccagcct gtaatagaac ataagacccc taacaaaggg atccagagcg aggcctagtc 300
ctcggaggaa gtgggagacg aacacaatgc tctcgttggg ttcaggagta gggacgacct 360

cccctcgggc gggcagccta tgcgaaattt cggcggtcag atatctggcc tccctcaact 420
tcttgatg 428

<210> 798
<211> 439
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-C6

<400> 798

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ccacctcgcc ggagccgtcg cttgcttccc ggtgatgccg cctcctcgcc ctgccactga 120
agtgcgaggg cgccaccgga ttcaatgggg tgtgccgacg gccgtcagac aactacggcg 180
tcgagtttga acacaccggt attggctcga cacatactcg tcagcctacc tcatgacatc 240
gctgtgtgga ggctcagcct ccccgcccg aaactcaatt ccctgcaaatt tgagtctggt 300
gaatgcggag ctcgtcagcc cgccgggtgac aattgaatct agcccaattt gggcagctcc 360
tcacattggt gtgatgagt gggaaaacat tcgagagagc gataaggatg ccatggcagc 420
gttactaag gcacatcgg 439

<210> 799
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-C8

<400> 799

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ggccgagaag cggtgccgg cgggcaagac ggcgtccaag gaggccggcg gcgagggcaa 120
gacccggggc cgcaagaagg gcagcaaggc gaagaagggc gtggagacgt acaagatcta 180
catcttcaag gtgctgaagc aggtgcaccc tgacatcggc atctcctcca aggccatgtc 240
catcatgaac tccttcatca acgacatctt cgagaagctc gccggggagt ccgccaagct 300
ggcccgtac aacaagaagc ccaccatcac ctcccgggag atccagacct ccgtccgcct 360
cgctctcccc ggggagctcg ccaagcacgc cgtctccgag ggcaccaagg ccgtcaccaa 420

gttcacctcc tcctagactg acgatgcg

448

<210> 800

<211> 440

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-C9

<400> 800

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atgatatgtc ggctcattct ctcaaagggtg cccatagggg taggggtgtc gtgtgtgcgt 120

tcatagggat gattgtatgc gcgtgtatat aagcgcttgt gtctgtattg atgctcaaaa 180

aaaaaaagtt aaccatcatg atttacattg caatttcttt taaagttatg ctaaagtgtc 240

cccacctgtc gaactaatgt aggagcaatc gtgaaataga tactactctc tccatttcca 300

aatatgtgtc tttctagaga tttcaacaaa tgactacata cgaagcaaaa tgagtgaatt 360

tacactctat atacatccgt atgttgaaat ccatttaaaa tataaaagac aaatatttag 420

gaataaaggg aattccaaaa 440

<210> 801

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-D1

<400> 801

attcacgggt cgacgggata ataatgggtc ggatgggtgtt gttcccgaga gtggtcctgt 60

cgaagatgag gagcatattg cttctctgag gcctaaaaga tcaaagagac tagtgaggag 120

cacgggtgag gataaggaac ccgttgctgc ttgtgatgtt gagaaacctg cagatgcagc 180

tgaaaacaat gacaacaatg atgcagaaga gttgcaatcc cagactcctt cagcctagtt 240

gacctactgg gttgacctga tgaaaacata agatgcgaat ggcaagactc taatttgtgg 300

tgttgagttag gagcatcaaa gatggcaccc attggaggag ctctggatct gcttaagggtg 360

ttacgcagtt caataagtat tttaactgtg ctgtgcagct tcttttc 407

<210> 802

<211> 439
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-019-Q1-E1-D12

 <400> 802

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 cttcttttagt catgaaaaga attggtatta ggagggaaca caacagatga aatagagcta 120
 gtggcagatg cttgcataca tcagatccaa tgcttttact acataaaaca atcccttgaa 180
 ttaatagtgg caaaatgcaa tggataaaaa caatgggtaa gccctttctc ttttggttagt 240
 attggttcta ctctccttg ctactttgaa gtactgataa ttctcctcct tgggcatgtc 300
 atttcccaga ggggttaaaat gggcactctt aatttctctt tcggaggaag cggagaagct 360
 gtagatgacg ctaaggcaca gaggaagagc aagaactgca acacctgtgg atgttggtcaa 420
 cgtttctcat tgtaattga 439

<210> 803
 <211> 419
 <212> DNA
 <213> *Triticum aestivum*

 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-D3

 <400> 803

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 gagcagatgg cgccgtggtg gagggcaggt accaccacaa cctggacctc ttcacgatgt 120
 ccaaggacgt cgccgccaca aagatgccgt gcgctgaca cggcctaacc cgaccaaccc 180
 ctgggggaag aaagacacca ctgccacggt tctactgtcag ccttcagccg cgggtgctctt 240
 gggcacattc tccggtggtg cttangagtc tgcaccggtt actgtaccca tatgagctta 300
 tgttggtggt tgtgactgtt agaggatctc atgcttggct atatatagga atcctgggtt 360
 gtcgaaactc gaataatgaa aagttgaaat tgcattctga atttgcgcaa gaatataat 419

<210> 804
 <211> 428
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB103-019-Q1-E1-D4

<400> 804

ggccaagaat tcacgggtcg acggcgaggg cagatgaaaa tgtgctgaag cttgtggcaa 60
aacacaagag ggagaaaaag gctgctctag atgagattat caagttagag cagaaactgg 120
atgccaaaca gaagcttgag ctagaataa aacagttgca gggaaaattg gaagtgatga 180
agcatatgcc aggtgaagaa gactctgaat caaagaggaa aatagatgaa cttagtgccg 240
agctccagga caagtatgat gaaatggatg cagtggaagc actccaccac actctgctta 300
tgaaggaaag gataagcaac gatgagttgc aagatgctcg gaagaagcta atagatggtc 360
tgcgggatgt tacaactgcc cgagcaacta taggcgttaa aagaatgggt gaccttgatc 420
tgaaatcg 428

<210> 805

<211> 305

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-D5

<400> 805

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aacgggtgac taacacgtac aagtctgccc ttggaagggg aacatcaact ggaaccagtt 120
gcggataccc cgtatgctgg ggatgttcaa aacatgacca atagctttga tgtccggact 180
ctctagacga tccaagcata tctacccatg cattccagct catcgatcct ctataatggc 240
accaaaattc ttatcagtgg tcgtagtatc aaaagggtcat tctgggtcat ggctctgagt 300
tacct 305

<210> 806

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-D6

<400> 806

gtaccgggtca ggaattcccc ggccgacggg agtggtacca cgatgccgaa aactttatgt 60

gatattctag gtttccatga tcttgatgat tgctctttaa atttgcacct tgcggattcc 120
atcattaataa agccaatggg aaggatcaat tatgttctca ttgttgcaaa tagaaatttg 180
gtgcccgtag attttatcgt tcttgatata gattgcaatc tttcttgccc tattattctt 240
ggtagacctt tccttagaat gataagtgcg attattgata tgaaggaagg gaatattaga 300
ttccaatttc cattaaggaa atgcatggag aactttccaa gaaagaaaat taaattgcct 360
tattaatcta tcatgcaagc tacttatgaa ttgggtgccca aagatggcac tacttagatc 420
tataccttgct tttatgc 437

<210> 807
<211> 356
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-019-Q1-E1-D7
<400> 807

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tagattagat ttattttctt acctattgtc caagaaaaag ccacaaaaca aaagttagat 120
ttaatcaacc tttggcctaa ccagactgaa cctttggaat tttcctttca atggttggaa 180
taatgaatta acggttgcac caacgtgtcc aattgctggg cctaattgtcc aattccttta 240
aagtttcgag ttctgttcac aataatcacg caaccgctgg atcaatatcc caaccgctgt 300
gtaacatccc atacaacaat ttccaccaag tgctaagcac tgtttaaatgt cacaat 356

<210> 808
<211> 443
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-019-Q1-E1-D8
<400> 808

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agctgtatct taaatcacac atacagatct cagtgtctaa gatcggttcc aatgaaacaa 120
cccaccatgt actcctacat ggcctctcat cgataccttt accaaaccgt gttcaccaca 180
ctactctcat taccgacata atcatttcac tctagccatc accagatga accagacctg 240

acacgactct aagcatagca ggcatagcaa ggtaggaaca acacatacat atggctcaat 300
 caactcctac acatgctagt gggtttcata tagttactgt ggcaatgaca ggtcatgcag 360
 aggaaatggg ttcaactacc gtagcacaca gcagtttgaa acgcgttgtc ttaatgcagt 420
 aaaagagagc aggagcgaga aca 443

<210> 809
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-E1

<400> 809

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 ggtgggggtt tgcggctgga gcggagaggt tatggcgcc tgggatttcg aatggcaaaa 180
 agggggcgat gggagggggg gaagcatgac ttagggacgc gcttgccaa aatgtagggt 240
 gtgttataaa agtaccccc accaatttga actagcagcc cttttggctc agggtcagaa 300
 gggggatttc gcgtgtcggg atttggcagc tggagggagt ttcgtgcgc gttgtaattt 360
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 c 421

<210> 810
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-E10

<400> 810

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 ttgttgcatg gaaccacact aagagcggga tgtttagtgt tcgctcagct tatcatgcgg 180
 aatggagcta tcgatttggg aggcacgaaa gaaacttact tggcgtcgag gggtcacata 240
 tcatcccggt tgtggaagaa gcggtggagc ttatttgggt ggtgagcact atatggaata 300

ttgccgaggg gtgtcgggtgt accaaacatt atttgtaccg aaattaatct taactgttgc 360
 atggtacatt tgggtgggaga gacggcaaac ggcaaaccgt tcacaatgga ccagtataga 420
 cgcctca 427

<210> 811
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-E11
 <400> 811

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 tagtttttgc ccaataactc aattaaaacc tttaaaaaaa cgggggggggt ttaatttaaa 120
 aaaattaatt gaaaccagcag ctcaactaaa ataatttggg aatcccttaa aaacacaatg 180
 gaaatttgct ttagggcata ataaaaactt catataagtg aattggatac tatgagaagt 240
 ttgatacttg ataattgctt tgagaagaga tggatgatatt agagtcatgc tagttgagta 300
 gttgtgaatt tgagaaatac ttgtcttgaa gtttgtgatt cccgtagcat gcacgtatgg 360
 tgaaccgtta tgtgatgaag tccgagcata ttatatttat tgattgt 407

<210> 812
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-E12
 <400> 812

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 ctgggggtgca gagaagcaca agtgagagtg gtcgccatat aaccttgat ggggatgaat 120
 tatgtgctca ggggaggtgg tgtgtgttgt gtgtgtgtgt cagatattga gagaaaacaa 180
 acctaaggag agaaatgtgt gtgtatgtga cgaaaagcta catgctaaac agggatttca 240
 cgaagagatt gtgcgtgcga gatagagagc gatgtgcggg ccttgaggtg ggcagggggcc 300
 aggtgaggggt gtcaaaatgt gcatgttgat gcatgtgtta catgcgatcg tgcgagggac 360

agacaaatcg agagagatgg ttgttggtt acggatgctc ctctctctct cacacacaca 420
cacacaagta aaatagaaga ccg 443

<210> 813
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-E2

<400> 813

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ctttcgaaac gataatcgcc atctcatcga aagacgggac acctttgcct ctatcaagtg 180
gtatcagatt tccaggttgc ttggtgagat ttacaactt ttcgtagttt agatcgagtc 240
tgttcttcat acctatagtc cacgaaaaag ccaaaaaatt agggttagtt catcctatcc 300
gaaccaatct gagcctttgc ataatctttt ctgtatttgc tttgttgaat ttgcggttgc 360
atcgtcgtgt caagttgctg gtcttagcgt ctagtccttt agagtttcga gttctgttca 420
caggttgtca cg 432

<210> 814
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-E4

<400> 814

aattcagcgg tcgacggcaa ctagtatgca tcacaccctg atgatctctt atgtatatct 60
tatcatgtta cttctgtaat caaacatcta agatgcgctg ttgagcgcat tatcagctaa 120
taaagggcat ctgccatcat tgtataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaacaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaagggggccc cccaaaagtt ttaaaacttta atttccggta aaagaaaatt 360
aaaacccctt caaaagggcc cccaaattta atttaaaggg gccttttttta aaaacctttt 420

agggggaaaa

430

<210> 815
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-E5

<400> 815

ggtaacggtc tagaattccc gggtcgaccc cttctacatg cgtgccaaga tcttgggcag 60
cgctggggac cgtcaagtcg cgagttctta cctcgaaggc gtcattctgg caaaccaaga 120
taaggataac ttctctgtgc cttactttcc cgagtaagtc ctcccctcaa ccagcccgta 180
acatatgaat tcttacattt cgatcgtttt tttaacattc cgtgttttct gcagtgcacac 240
acgttgacag ctcatcctcc taagcccca atattctatg gccacgtatt ttgaccgcga 300
ccgtcggtcg aacgtagact acgcaaagt caagaagggt cttgatgatg ttctccccgg 360
ctacgcca aa tctggaggca ccttcaccag gcctattcgt aagtacgaca agcacg 416

<210> 816
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-E6

<400> 816

cgcgccagg taacggtcag gaattcccgg gccgacggga cctacaagat ctacatcttc 60
aagggtgctca agcagggtgca cccggacatc ggcatctcct ccaaggccat gtccatcatg 120
aactccttca tcaacgacat cttcgagaag ctgcgcggcg aggcggccaa gctggccagg 180
tacaacaaga agcccacat cacgtccagg gaaatccaga cctccgtccg cctcgtcctc 240
cccggcgagc tcgccaagca cgccgtctcc gagggcacca aggcggtcac caagttcacc 300
agcaactagg gttccgtcgc ggtgtctcta gggttccgtc cccgtgttct cttctagtag 360
cttttgtgtc gccgtcggtc gtgccatgt gtatcggtat aggtaggtag cgcgccgtgt 420
ttgtaaatcg tgtcagggtg tgatggacgg ctt 453

<210> 817

<211> 381
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-019-Q1-E1-E7

 <400> 817

 gtaccggtct agaattcccg ggccgacggg atgcgacaac ggacagatcc agctcgatgg 60
 aggacgggag cctgagcaag cgcgagaacc aacggtagcg atgatgatgg gaatggcaca 120
 acgacgacga tgctgccgaa ccgcccgggac atgatctgag tctgtgcgga tcggactgcc 180
 ccttgctaga taatgtacgt acgtacgggt accattaacc aagcatgtcg tgattgcatt 240
 attttttggc ccctgattgg atctcatagt acttatgata tacttataac caactcaacc 300
 cccctcctcc ttgctcttga ttgtattata tgtgcgagca tcgttctatg acagttcttt 360
 gatatactca cttgttgaac c 381

<210> 818
 <211> 442
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-019-Q1-E1-E8

 <400> 818

 gtaccggtca ggaattcccg ggccgacggg gtccgtagag atcttcttct cccgcaacaa 60
 cgcattgttc gccacccggc ggatgaagct gctgcagcgc gtggcctact tcaacgtggg 120
 catgtaccgg ttcacctcca tgttctcat cgtctactgc gtgctccccg ccgtctccct 180
 cttcaccggc aagttcatcg tgcagcacct gagcgccacg ttctctgtct tctgtctcat 240
 catcaccatc acgctgtgcc tgctggcgct gctggagatc aagtgggtccg ggatcacgct 300
 gcacgagtgg tggcgcaacg agcagttctg ggtgatcggg ggcaccagcg cgcacccggc 360
 ggcagtgtcg cagggcctcc tcaaggtgat cgccggcgtg gacatctcct tcacgctcac 420
 gtctaagccc ggcggcgcg ac 442

<210> 819
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-E9

<400> 819

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 agccttactg aaaattcaaa cctaactaac tttaactaat tttccttaaa caaaattgca 120
 aatataaatt acccaatata tatatcattt cattcatctt cgagaggcaa ctataaatat 180
 ggggaaagag tgtacaaaga aagaccgtcg tatgacctgc aacaatttca accatccttt 240
 ggtgtggagg aatatcatag gaactctaca tgatatgatt tttataggat ttttttttct 300
 ttagagcgaa ttggttcgta ggaatagatt catatactcc atatttcaaa ggaaaataaa 360
 catgatacat ttttatagct ttagagccca ttagaaaata aacatgaatg gattcccata 420
 ctccac 427

<210> 820
 <211> 375
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-F1

<400> 820

attcacgggt cgacggcggtt gaatgaatcc attgtgagaa gagcccttgt gatcatgcac 60
 cagaggggacg aagtggagta caagaggag cgccatgtga ttgtccgcaa ggcttgagct 120
 gaaccgaaat gatggaacta ccatggaaac cctctggcca tctgatgtgt gtgtataagt 180
 agtgctgaca ctgcagcctg tttcctgagg aaatttgttg cgtcggttgaa attgagttgt 240
 agttgtacta ctttaagctg tagctgtagc cctaaattat cttgtgtcga actgaagatg 300
 taccacagta agttcattca tgattgcaac atttgggcgt tctgcagctg agcagagtta 360
 atgcctaaga aaccg 375

<210> 821
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-F10

<400> 821

attcncgagt cgacgggcct gacaatgctg cattcaaaat gcttgcccag atccactagc 60
caatcgtcag cgtcggtagc ctcaacacaa ccgctgaacg tctttggggc attagcaagg 120
aactgggtca gagtagcaaa gtggtgctga ttgttgectt gattcccttg actgccttga 180
ttgcgctctt gaaggatttg catgatcaac tgtgtgtttg cattagtagc ggccatcaca 240
gcttgccatg cttccggagg aggcggaggt ggaggcggat taggattcgg agtcgtgcgc 300
gttgaggag ccacctgaa caggttgacc accattagca catagataga caacaatata 360
gaagctgaat ccaacggaat gaaaattgca acatatagtc ttcacatccg aacaagatga 420
acgaatgcat 430

<210> 822

<211> 411

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-019-Q1-E1-F11

<400> 822

taccggtcaa aaattcncgg atcgacgggg acgttgagaa gctgattggc aggatattga 60
attggctgaa ccccggtggc caaatttcca ccaggaaacc ttgcttcaac aattctggga 120
attccaaaag gaaattgaac ccaacgcact accggaagcc aaggttctac accaagggtg 180
ttaaggaatg ccaactctat gaccaagagg ggaattcctt tgagctttct ctggtaactt 240
ccaagtgcac tggagcttat gtgaaaagca agaagaacca gaaccagata tgttggctgt 300
gggagaaggt caagtgcaca gaagacaaag gctttcagag attcctggac aatgtgcagt 360
acaaatccac tggaatcttg cgttatgagc gcgtgtttgg ggaagggtat g 411

<210> 823

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-F12

<400> 823

attcccggag cgacggggac gaaaagtggg ctaaggaaac tcgcaaggaa gggtccaacc 60

gatcgtctac ttaagttcga gagagttttc aaagcacaaa aacgtatccc tatgtctggt 120
 ttcaaagcac aaagagttct tgacgagatt cgctggcggt actacgagga aactggtatg 180
 atactgaacc tcatgcccta tcgagcatct tatcccatct taaagttggt ttattcggca 240
 gccgcaaagt ctactcatta tagggatttc gacaaagcga atttatttat tactaaagcc 300
 gaagtcagta ggagtactat tatgaagaaa ttcagacctc gagctcgagg acgtagtttc 360
 ccataaaaaa aaagcatgtg tcatataaca attgtactaa atatagtaaa gaaatcttaa 420
 gatttcgat 429

<210> 824
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-F2
 <400> 824

attcacgggt cgacgggtac caatctatcc acctaggagc atgcgcataa taccttgctt 60
 gatttttgca ataagtatat gtgttcttta tgactaatgt tgagtccatg gattatacgc 120
 actctcacc cttccacctt gctagcctct ctaataccgc gcagctttcg ccggtatcat 180
 acaccacca tataccttcc ccaaaacagc caccatacct acctattatg gcatttccat 240
 agccattctg agatatattg ccatgcaact ttccaccgtt ccatttatta tgacacactc 300
 catcattgtc atattgctta gcatgatcat gtagttgaca tcgtatttgt ggcaaagcca 360
 ccaactcataa ttctttcata catgccactc atgagtcatt gcttatcccg gtacaccgcc 420
 ggaggcactc atat 434

<210> 825
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-F3
 <400> 825

tcaagaattc acgggtcgac ggggcctcaa atgtgcagtg gtcggtgtcc caaagaccat 60

cgataatgat attgcggtga ttgatanatc ctttggattt gacactgctg tggaggaggc 120
tcagagagct atcaacgctg ctcatgttaa acctgaaagt gcaaaaaatg gcattggggtt 180
gtgaagcaaa ggggccgcaa cagtgggttc atcgcaatgt atgctactct agctagtcgt 240
gacgtggatt gttgcttaat cccagagtct ccattctacc ttgaagggaaggaggcctc 300
cttgagttcg tcgagagacg gctcaaggac agtggtcata tggtcattgt ggtggccgag 360
ggtgctggcc aagatctcat cgcccaaagc atgaactttg tggacactca agatg 415

<210> 826
<211> 413
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-019-Q1-E1-F4

<400> 826
attcacgggt cgacgggcta gtggattctt gggagcattg tacctccaca cgctccaaac 60
ggagattagc acccgcaagg atgtgaactt cgggatacat cgctcctccg cgtgcctcgg 120
ttatctctta cccgaccctt ttacttatgc actttacttt atgatagcca tagtgtttca 180
tgttgtatat cttgcttagt ataagttggt ggtgcacata ggtgaggcta gttgttttag 240
gttttctgct tgagaaatta aacgctaatt ctattccgca tttgttcaac cctaaaccat 300
aattatttta aagcgcttat tcacccccct ctaggcgaca tccacgatct ttcacccagc 360
tttctccaaa ctcccttgcc ctattgaaga ggaataacat atgtttcata cct 413

<210> 827
<211> 410
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-019-Q1-E1-F5

<400> 827
ggtctagaat tcccgggccg acggggaagc cagcagcagc cttcttacag gctttgaggt 60
aagaagttaa aaatatgtaa tgtagtaccg catggatagt agccccctaat gccagttcg 120
gtgttcggaa agaaaaagcc ggactgagga tctaaaaaga tatacgcagg agttctaaaa 180
atatgtcaat atcggattgc aggctgcgct gctgacctct gccgcattga ctgcgaaggt 240

cggtgctttg aagcaagacc tcgagcggac cgagaacgag ctcggccttg ccaagaagca 300
gctcgaggac aaagaagggtg ggtaacaccg taataaatTT gtaccttaca gaaaaggatt 360
ttggttgcaa tagaaataac aagcataact tgggcactgc anggggcacg 410

<210> 828
<211> 438
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-F7

<400> 828

taggtctag aattcccggg ccgacgggga atttgatcag cattttcttg agcgccattt 60
tcttcagcat tttcttcagg tgcattagct cgacgttctt cacgttctgg aatgaattct 120
tcagcagatt cttcggtagg aatgacatcc tcagtagcct tgaacttgat agtttcctca 180
ggtgctgggt catctatcac agaaggtagg tgctttcttt gcgagccatt agtttcacg 240
aatcgcacat ctacagtttc aacaaccttg tgaagaacgt tgttgaagac tctgtaggtg 300
tgcgagtctt ttcgtaacc aagcataaaa cttcatgtg ctttcagtgc aaattttgag 360
ttgtgatgag gatctctaatt ccagcattta gcactgaaga ctttaaaata actcacattg 420
ggtttcttgt cagtgagg 438

<210> 829
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-F8

<400> 829

ggtcaggaat tcccgggccg acgggcatg caggtaggaa agtggacgtc atggatgatg 60
atgacctgat tgagagggag ctggaacatg gcgtggagtt ggctgccgag gacgagaaaa 120
aacacgacag aaggcagagc tggccccacc ccgcgcaccg ggaggatcac cagaacacgg 180
ctcgcaaggc ggagaacacc gaagagggcg agctgtccct ggatggccag gaataccgct 240
ctcctggccc cgacaaccgg aagaggaagg acgcgcacga gcacaggagc aatgaccgca 300
gcgccgagag agacatcaag aggccgaggc catgagatga agtattcatt gtgggggggtg 360

atcagcgggtg acggactgag aactgggtgtt ttgagcgcca gtgcgtgata cctagttttt 420
gcatcgcggg aacatac 437

<210> 830
<211> 292
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-F9

<400> 830

attccccgat cgacgggaga taaaacgggtg gagctgtcag tccgtcaacg ctccttccaa 60
aattgggggtc cggtaaaata accaaacttg aagggtgtaa taactgttgc caacaatttc 120
cgccttactt taaatggaaa aaaacaaaat tcatttccat tgcctatgat ggatttcgat 180
ttgcttttca catgaagcat caacataaat cgttgaccaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaggagctc aaaagggatc aa 292

<210> 831
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-G10

<400> 831

attccccgagc cgacgtactc ctttatggct gggagatggt catgggggacg attgtatggc 60
gtcaagatag gctctccaac aaagagccgc attgccttga ggtagttgtc acaatcaaata 120
gtaaagcgggt gatacattct tgcaggcaaa acaaccatgc cacctttctt aactgctata 180
cggatccact gttcgttttg gtccctcaca tcaaagtatc cactgccctc gagacaatag 240
cgtatctctt catcagtatg caagtgtctt tcaaagaagt tcttcagctt ggcctcatag 300
tttggaact tctctggaca tacgtcgcaa atgtccacat aagagtatcc cctggcctca 360
cggattttct tgagattctc gtctttctcc cagtcatcag cattcaggtt ccagcttaca 420
acacccaat 429

<210> 832
<211> 415

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-019-Q1-E1-G12

 <400> 832

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 cagcgggagcc aagcaaccga cgccaccatg ggtatctcgc gtgactccat gcacaagcgc 120
 cggggccaccg gtgggaagca gaaggcttgg aggaagaaac gaaagtatga gctcggccgc 180
 cagccagcca aactaagct ttcgagcaac aagacagtga ggagggtccg tgttcgcgga 240
 ggtaacgtga agtggagggc tctccgtctt gacactggta acttctcatg gggtagtgag 300
 gctgtggccc gcaagacccg tctcctggat gtggtttaca attcgtcgaa caatgagctt 360
 gtgaggactc agacccttgt caagaatgcc attgtgcaag ttgatgcagc ccctt 415

<210> 833
 <211> 397
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-G2

 <400> 833

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 gaacgaaaga taaagaacgt gtactggttc ttggtgccac aaatagacct tttgacctgg 120
 acgaagctgt gattangagg ttcccccgca ggctaattgt aaatttacct gacgcatcaa 180
 atagagagaa aattttgaaa gtaatttttag cacaagaaga gttgggacaa gatactgac 240
 tggcgtcact tgctaatatg actgatggat attcaggaag tgacctgaag aatctatgtg 300
 taactgcagc gcactacccc attcgagaaa tcctagagaa ggaaaagaac gagaagaatg 360
 ttgcaaagtc agaaggtang cctgagcctg cattgca 397

<210> 834
 <211> 435
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-G3

<400> 834

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tgtcagccag caaggggaag gcgccccac gtcttgatt cctgagagcc ggacggcctc 120
gtaatttttt cagaagggcc agnggaagcc ggctaggcta cccatggcta tttaccccga 180
cagttgtcga gatacacgac gtgtacatgg tggtaagtgg cgagagagtg tgtgaagaag 240
tacaccctg cgggggttata aatgatctat tcgaatagcc gtgtctgcgg taaaggactt 300
ctgggttgcc tataacagtt catagacaag tgaaagtgga tactcttaaa ctcgcaaggt 360
aagtgtgagt gctatggatg gccttctcgt agggagatga gagcggatcc atagtgggtg 420
actgaatggt gaata 435

<210> 835

<211> 429

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-019-Q1-E1-G5

<400> 835

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ctccctagat gggagaaggg tttccctctt ggtccttgge tcccatggcg cgggagggga 120
gagagcccct ccgagattgg atctatctct atttctgcgt tctcagatcc ttcccttca 180
ccgtttcttt tatatccgga gatccataac tccgattggg gtgaatcttt cgcccagatt 240
attctcgtaa aattagcttt cttgcggcaa aagaagagcg tcaaccgcct tacgggtggc 300
ccaagagagt gccangcgcg cccctatct cctggccacc tcgggcaccg tttctacaag 360
ttggagcatg anggtgtttt tttgatgtct tccttatgag tggcggtcgg gggacgagcg 420
atggtcttt 429

<210> 836

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-019-Q1-E1-G7

<400> 836

tacgggtccag aattcccggg ccgacgggtg cataaatatt cgactactca ttgatcttca 60
cttatatctt tccgagtagt ttgtcgtttg ctctagtgtc tcacttatat ctttttagagc 120
acgacgggtgg ttttattttg aagaaataca tgaactctca tgcttcactt atattatttt 180
gagagtcttt agaacagcat ggtaatttgc tttggttatg aatttagtta taatatgatg 240
ggcatccaag agggacataa taaaaactat catataaagt gcattgaata ctatgagaag 300
tttgattctt tatgattgtt ttgagatatg aagatggtga tattagagtc atgctagtgg 360
agtagttgtg aatttagaaa tacttgtgtt aaagtttgtg attcctgtag catgcacgta 420
tggtgaac 428

<210> 837

<211> 313

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-019-Q1-E1-G9

<400> 837

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gctgctgatg gaagggggcg agcgacggag gaagacgcct cccgatggat caaatcgggg 120
gtagtattgt aatttcacac tatttcacct ggtcggaaag atgccccag cgacaattat 180
ttcggaacgg agggagtaat tttttacata acctagaatg ttcttctgaa ctataatttt 240
gaatgagcca ttatctgaga tttaaatcta gccaaaaatg atcatggctg atataatgca 300
ttctcagaat gct 313

<210> 838

<211> 435

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-019-Q1-E1-H1

<400> 838

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ggagtga gca gcggttgcgca gagacttggg agtagatgga ttggagtggg ggggcgcctt 120
 tattatatga gagtccaaac tctgttgcgt tcacatcatg ctggctctat tctgcttctc 180
 caattaattc cctctgcatg taattgagga tgcattcattg accgttcaac gtctcgagaa 240
 ccgctacca ctcctcctt ggcattcaag cacctatgga cccgtcgatg acgagggtgc 300
 tatggtgact tcgtaaattt caagatgata gtgccgtgca tatgtgcatt catanggggtg 360
 agtgatgcg cgtgcatata agcgcttgcg tctgtactgt gtanaaaaac gtaaattgcat 420
 gtcaaaaaga gacta 435

<210> 839
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-H5
 <400> 839

acgccgtcag gtaccgggtca ggaattcccg ggccgacggg tttctgatga agttttgtgt 60
 ggatgaagtg ttcgatgacg gagaaggctc cgatgtgaga agaaggaaga gatgcaagag 120
 ctcagtcttg gggatgcccc aggcacccca agtaaattt taaggatact caagcgtcta 180
 agcttgggta tgccccggaa ggcattccct ctttcttcaa caagtatcag tatgttttcg 240
 gattcgtttc gttcatgca tatgtgcaat cttggagcgt cttttgcatt tagttttcat 300
 ttttatttta tgcacatgca tggatggga tagtccttgg ttgatttata gaattctcta 360
 tgtacttcac ttatatcttt tgagtatggc ttatagaat gttcatgtg cttcacttat 420
 atcatttg 428

<210> 840
 <211> 241
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-019-Q1-E1-H6
 <400> 840

attccccggc cgacgggagg tgagaacggt gatgagggcg atgagtatta agcctgcctc 60
 ctggtgcttt cccaaggctt gctactgcta tcctatgacg tgccccgagt gctttatctg 120

ttatctgtct gtttgaacgt ttgctttgtg gtgtttgttt tacaacctgt tgtgttgtaa 180
 gaaccttgta tctttgaacc tgctttgcac cttgggtaat atgcatgcta tctgggtatc 240
 t 241

<210> 841
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-019-Q1-E1-H9
 <400> 841

ccggtcgaga attcccgat cgacgggaca ctcaagcaac agttagctgc tatcgctcca 60
 acacttgagc agttgaataa gaaaaaaatt aaaaaaaaaa gggaaatttg taagtgtaca 120
 atcacanatt tatcaaataa gtggtgagat tgctggcacc acagaggctc gtgagcaggt 180
 ggctacacca caggtcaacg aggatgattt gacacttgag aggcttgaag attttcggtc 240
 ccaactccag gagcttgaga aagagaagaa caatagggtg gagaagggtc ttgagtatgt 300
 aagcatggta catgatctat gtaccgtctt gggcatggat tttctcagca ccgtagactga 360
 agttcatccc agtctagatg actccattgc tgataactgc aagagcatca gcgacgagac 420
 attatcaaaa ctttacaaga cag 443

<210> 842
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-A10
 <400> 842

acgccgcaa agtacggtct agcattcccg ggtcgaccg aaaacaaata ataaacttca 60
 acataacaaa ctttgggggc cacattcatt tgcaggaatt ttgcaggcaa ggaaaatggg 120
 aaaaattcct aaaaaacaga gggccaatat gtcacttact cggcacatga tgagaaattt 180
 ctgtgcactt caaactactc cctccgtctc aaaatataaa aacatttttg acactttgca 240
 agtgtaaaaa acgttcttat attttgagac ggaggaggta caatacaaat agtttggatt 300
 tatctttcca tgctttgttg ccaacttcat taagaaaaag tactcccca ttaaaaatgg 360

gtaagtaacg tttccttttg attttgtagg gtattttctc ctgtagttga attccttttc 420
 ttctctcgat acatactcca tatg 444

<210> 843
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-A11
 <400> 843

ttcccgggtc gacgggggag agctttataa gaaaagcact accggagtcc ttcaaagggtg 60
 catctccgaa gaggaggggc ggaacctcct ggctgaaatt catgccggac ttagcgggtca 120
 tcacgtgca gcccggtccc ttgtaagcaa agccttcctt acaggctttt attggccgac 180
 ggcccgggca ggcgcttagg acttagtcca actatgcacc ggttgccagc tctttgcaaa 240
 ccaaagccat atgccaccca ccgccctcta aactatcccc attacttggc ccttcacggt 300
 ctgggggctt gacatgggtg gacccttaa aggcggaacc tacaacaaa aatacact 360
 ggtcatgggg gataagttca ccagatggat agaagccaag cctgttaa 408

<210> 844
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-A2
 <400> 844

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 tccacgcggc gtcataacag tcaatggaaa tacggaacgc tcccttcgta cagaagagca 120
 cacagctgcc ttagcagcgg aagtagagag cggccttctc aagcaaaacc ttaatttggc 180
 tgccgagcca cggacatcgt taagagggtc cgaactactc tacagcagga gagctcggct 240
 cgccaggagc tcgactagca atctggcctc cgtcttagtc ccgatcaagt ggtggcattc 300
 gtgtcgcgcg tacataacta cgcaactaaa atcccatggg caacgacgga gggataacta 360
 gcttgtggtc caaagtacgg gtcaaccgac atcggatata cacatacttt cacttttact 420
 tgtttccttt tcaggtctca atcccaca 448

<210> 845
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-020-Q1-E1-A4

<400> 845

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 ttccacggac ccaaagacag tatttaccag ggtggtgtgt ggaaggtcag ggttgaactc 120
 accgaagctt acccttataa atccccctcc attggcttca ccaacaagat ctatcacccc 180
 aatgtcgatg agatgtctgg ttctgtctgc ttggatgtga tcaatcagac atggagcccg 240
 atgtttgacc ttgtgaatat ctttgagggtg ttcttgcccc agcttctcct gtacccgaac 300
 ccctcggacc ccttgaacgg cgaggcggct tcgctcatga tgcgcgacaa gaatgcctat 360
 ganaataaag tcaaagaata ttgtgagaga tatgccaagc ctgaagatat atccccagag 420
 gaggaagaag aggagagtga tgaagagctg agcgacgcc 459

<210> 846
 <211> 462
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-A6

<400> 846

ccgccaggta ccggtctaga attccccgggt cgacggggaa ttgatcgaga agcactgcgg 60
 aggtgtgaga ggaggatggg acaacctgct tgcagttatc cctggcgggt catctgttcc 120
 tttgttgcca aagcacatat gtgatgacgt gttgatggac tatgatgcac taaaggctgt 180
 acagtccgga ttaggcactg cagcagttat ggtgatggac aaatccacag atgtagttga 240
 tgcgattgct agactgtcat acttctataa gcatgagagc tgtgggcagt gcacgccttg 300
 ccgtgagggt acaggatggc tctggatgat catggagagg ctcaaagtgg gcaatgcaaa 360
 gctagaagag atcgatatgc ttcaggaggt gacgaagcag attgaaggcc acacaatctg 420
 cgccctcggg gatgctgcag catggcccgt gcatggtctt aa 462

<210> 847
 <211> 449
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-A7

<400> 847

cggtcaagaa ttcccgggtc gacggggtac tactagcgag actgaagtct ctctgcaaaa 60
 acataaatta agcaacgtga gtacaaatgt acccagcaag acttacatca gatctaacta 120
 catatgcatac attatcaaca aaggggatgg tggggtttaa ctgcagcaag ccagctttga 180
 ctcggtggct tcttgaacta cgactgcaat gtaactcttt gaggtggcgc acacgagtcc 240
 acatattcac catatcaata caccactatg catccgctcc tgtctcccta cgagaacgcc 300
 atccatagaa ctcacgctta tcttgcgtat ttaagagtat ccactttcac ttgtctatgt 360
 actgtacagg caaccagaa gtcctttacc gcggacacgg ctattcgagt agattatatt 420
 aaccctgcag ggggtgtactt cttcacaca 449

<210> 848
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-A8

<400> 848

ccggtctaga attcccgggt cgacgggatg attgggatac taaaagccac aatgtatcga 60
 ggcttagtggt agtcagtcac cagcctctcc gttgtttgaa caactgaaca acaacatcaa 120
 gcggcgccaa aacatattgc tgatctgaga gacatccgag acatgaatga ggaaaaaatg 180
 agaaggtcgg ccattgttgg ctcaagctca ggaggtgggtc gaaagcctgg ctccacatgg 240
 tcttagcact actgtcacac atggtgttcg ggccacttcc accagtgtct tgcgggttgt 300
 cgttccgcga gagcaatgac ggggagaaca agatgatgag gtgctttgct cgctgcatt 360
 gcgctgcttg cgctcgggac gtgcatgtct acagaagagc catgacatac t 411

<210> 849
 <211> 442
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-020-Q1-E1-B10

<400> 849

accggtctag cattccccggg tcgacgggac agattcgga gagctcgaga gagtgcgacc 60
aaaatggcga tgagatgcgc gctgacctcg ctccccgcgc gcctccggtc cccggcgggtg 120
gtagccagcg ggacgcggcg ccttctgagt gacgggaagg ggcgcgtgct cagcgaggag 180
gagcgcgcca aggagaacgt ctacatccag aagatggaga gggagaggca ggagaagctc 240
aagaaaaagc tcgaacagga gaaggatgcg gccgacaagg ctaagtccgg cgccgacggc 300
aagaaggccg agggaaactaa ctaggagcga tcttcgcctg cctgaagggtg accccatctt 360
ggacgcatct gggggacatt tgtgtttata gatgtccaga gatggaagaa taaattctgt 420
aaagcgttga tagcgtatc tt 442

<210> 850

<211> 437

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-020-Q1-E1-B11

<400> 850

accggtctag aattccccggg tcgaagggcg tgggcatatc tttttagaa agaattaaaa 60
tctcttgctt aacttatatc tatttagaga gatggcagga attggtcatt cacatgggta 120
gtcataaaat cctacataaa cttgtagatc gctgaatatg atatgtttga ttccttgcaa 180
tagttttgcg atataaagat ggtgatatta gagtcatgct agtgggtggt tgtggattgt 240
agagacactt gcgttgaggt ttgcaagtcc cgtagcatgc acgtatggta accattgtgt 300
gacaaatttg aagcatgggg tgtttctttg attgtcttcc ttatgagtgg cggtcgggga 360
cgagcgatgg tcttttccta ccaatctatc ccctaggag catgcgtagt agtactttgc 420
ttcgagggct aataaac 437

<210> 851

<211> 437

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-020-Q1-E1-B12

<400> 851

accggtctag cattccccggg tcgacggggt caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 60
gcggccgctc gaatacctgc agcacgagaa tttcatggaa tgagcagtca gttagtcaag 120
gcaatgccga gtcttatttt tacaaaagtc caggaagaca attgtacttc gtcaacatgt 180
gccatttgct tggaagacta cagtgttggt gaaaagataa gggtgctgcc ttgtcgtcac 240
aagttccatg ctgcttgctg ggacctgtgg ctacatcat ggaggacatt ctgccctgta 300
tgcaagcgag atgcaaatgc tggaatgtca aatttccttc catcagagtc tacccttttg 360
ctttctctg ctattccctt gccagctgaa tcgacagctt tgtcttcttt tcgttcaatg 420
gtagcagcat ctctcc 437

<210> 852

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-B2

<400> 852

attcaagggt cgacggggcac tccaagcaca agaaggaatt gcggccttga ggagcaatgt 60
tgatacactg atcgtaatcc caaatgataa gttactgact gctgtttctc caaatactcc 120
tgtgacagaa gcctttaatt tggcagatga tattctccgg cagggtgtcc gtggaatctc 180
agatatcatc actgtgccag gtttggttaa tgttgacttt gctgatgtac gatcagttat 240
gtcagatgca ggttcactct tgatgggaat tggaacagca acaggtaaga cacgagcaag 300
agatgctgcg ctcaatgccā tacagtctcc tctacttgat attggtattg aaagggcaac 360
aggaattgtg tggaatatca ccggagggag tgacctaaac ttgacagagg tgaatgcagc 420
agctgaagtg atatatga 438

<210> 853

<211> 424

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-B4

<400> 853

attctagggt cgacggggat gatcttatcg ggaggaaaaa cacttgaaaa gaaaagcatc 60
tttacctta ttcaaggaat caatacaatt tttaggcaaa gaagaaaacc aagtttttagc 120
acgattccca tagggagaac ggaaatagct tcaatttaac aatatcatta tccacatctt 180
ttttcttttg catatcacac aactcaagga aagtatttag atgggatgca acatcttcat 240
taggactacc agaaaattgt tctttcataa caggattcaa caaagcggca ttaatttcat 300
aagattccgt actagtggag agagcaatcg gagtactaat aaaatcatta ttattagtgt 360
tggaataatc acacaacttg gtattctctt gagacatcat gacaaagcaa gaaatctagc 420
acac 424

<210> 854

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-B5

<400> 854

ggtctagaat tcccgggtcg acgggggata gctaatacctg tcgaagacta tgctcctggc 60
catctccatc ttgcagcatg tagaagagag tagattgaag tcttccaagt agcatcgcat 120
agcataaatc ctacctggcg atcgccctct cgtcgccctg ttagagagcg atcatcgggt 180
tgtatctggc acttggaagg gtgtatttta ttcagtatcc ggttctagtt gtcataaggt 240
caagggtacaa ctccgggtcg tctgtttacc gaagatcacg gctattcgaa tagattaact 300
tccctgcagg ggtgcaccac ataaccaaac acgcttgatc ccattcggcc ggacacactt 360
tcttgggtca tgcccggcct cggaagatca acacgtcgca gccctaccta agcacaacag 420
agcggtcagc acgccgtctt aaccctaag 449

<210> 855

<211> 459

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-020-Q1-E1-B6

<400> 855

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gattactttc ctgggaacac cggggatata tgacggttgc catgcaaaca catcgacatt 120
cgcccgcagg aaagcaacga gcgcgctttc ctatttaggg ccgagcgtgg cactgatggt 180
gaaggtacca ccagtgccgt cccccttggc ggacaccttc ttggtctcag gtggagctgc 240
cattgctttc ttgcgcttgc cgggtggagct cgatggtgcg tcctcgacgg tagtgcagca 300
cttcgaagag gtgcgcttgc cggagtagac atcagagctc ttgccggact tggctcttct 360
cttccccccg ggagcttcag cggcaagtgt gttgtgatca gttgcggctg ctgcttcccg 420
gtagatcntg tcggcacaga taagagcatc cttcttctc 459

<210> 856
<211> 453
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-020-Q1-E1-B8
<400> 856

gccgccaggt accggtcttg aattcccggg tcgacgggta tgcgcgtagt actttgtttt 60
caatggcttg tagatTTTTg caataagtat atgagttctt tatgactaat gttgagtcca 120
tggattatac gcactctcac ccttccatca ttgctagcct cttcggtact gtgcattgcc 180
ctttctcacc tcgagagttg gtgcaaactt cgccggtgca cccaaaccct gtgatatgat 240
acgctctgtc acacataagc ctcattatat cttcctcaaa acagccacca tacctaccta 300
tcatggcatt tccatagcca ttctgagata tattgccatg caactttgat catcatcata 360
tgcagactt gagcatttat tgatcatatt ctttgcagta ccgtaagata gctagcatga 420
tgttttcatg gcttgtcggg ttttttgatg tca 453

<210> 857
<211> 419
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-020-Q1-E1-B9
<400> 857

attcccgggt cgaaggggag aagaagaaat ccagcgagaa catcaagggt atctacgccc 60

gcgccaagca gtacgccgag gactacgatg cccaggacaa ggagttggtt cagcttaagc 120
 gtgaggcccg gatgaagggg ggggttttatg tcagtcctga ggccaagctg ctgtttgttg 180
 tcagaatcag aggtatcaat gccatgcacc caaagaccaa gaagatcttg cagctgttgc 240
 gtttgaggca gatattcaat ggagtgttcc tgaaggtaa caaggccacc atcaacatgc 300
 tccgcagggt cgagccatat gttgcatatg ggtacccgaa cctgaagagt gtgagggagt 360
 tgatctacaa gagaggttat ggcaagctca acaagcaaag gattcctctg accaacaac 419

<210> 858
 <211> 286
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-C1
 <400> 858

attccggggtc gacggggaca ctagactcca gtggcacaag aggatctatg cttatgtacg 60
 agtgggagca acttcattac actacggaac tgtaagtga tgtcagctca gcgtgagtcg 120
 atttaaaacg tcggaactgg gatggaactg tctggacata tgatatgcgt gttgcagtac 180
 agctgacatt ggagagcggt tcttgaagaa atttggtggg tagctatcac tcacttgaac 240
 attgtgcgaa ttctgaactg tagactgtga ccctaaatga tactgt 286

<210> 859
 <211> 453
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-C10
 <400> 859

acgccgcaa gtaccggtct agcattcccg ggtcgacggg gacacacaga agattgttga 60
 gaagtactcc aactccaaca ttgaaattca cactttcaac cagagccaat accctcgcac 120
 tgttactgaa gacttcttgc cacttccaag caaagggcag acaggggaagg atggctggta 180
 cccccaggc cacggtgatg tgttccccctc tttgaacaac agtggaaaac tcgatacctt 240
 gctgtcacag ggaaaggagt atgtcttcgt ggcgaactca gacaacttgg gtgctatagt 300
 tgacatcaag atactaaacc acctgatcac taaccagaat gagtactgca tggaagttac 360

tccaaaaaca ttggctgatg ttaaagggtg taccctcatc tcatacgaag gaagagtcca 420
gctcttgag attgcccag tccctgatga gca 453

<210> 860
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-C11

<400> 860

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catctacgcc cgcgccaagc agtacgccga ggagtacgat gcccaggaca aggagttggt 120
tcagcttaag cgtgaggccc ggatgaaggg tgggttttat gtcagtcttg aggccaagct 180
gctgtttgtt gtcagaatca gaggtatcaa tgccatgcac ccaaagacca agaagatctt 240
gcagctgttg cgtttgaggc agatattcaa tggagtgttc ctgaagggtta acaaggccac 300
catcaacatg ctccgcaggg tcgagccata tggtgcatat gggtaaccga acctgaagag 360
tgtgaggggag ttgatctaca agagagggtta tggcaagctc aacaagcaaa ggattcctct 420
gaccaacaac 430

<210> 861
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-C12

<400> 861

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ttcaagccgg cccaccgctc aactagtatc tttgtgacct tgaggttgag gatagttggt 120
gagaccaaca tcggcaagca cccgaccgca gttacgcgat cagggtgatc ctcaatgttg 180
aagatgatag gcgtgctgga ccatttcagg ggcttgctg actctatgga tggctctgct 240
gcattcactt cccgcatcca ctatttgagc tggcgggtgag aagtatgcag agaggcgcca 300
ccgtcaacgc acaggacctc tgtgggtttc tgaaattctt gtcacatcgt ctcatcatca 360
tccacgtctt cgatcatgct gtcattctca tccttgcac ggccgtgggg aggctgtct 420

ccttgccgct gcttgg

436

<210> 862
<211> 441
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-020-Q1-E1-C4

<400> 862

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atgatgatgg tgataaaaaa aagggcgggc aatttcctgc agggaaaggg caggggaacc 120
aacccccgga ttgcaaccaa cattgagggtg cttcaaacat gaagacaatt tcccttggct 180
gaaaaatgtt tggttctgct tgatgcaatg tcgttgattt tggttctgtg gacccattgg 240
gggattgatt gcgttggttt tgtggaaaaa ccggtggggg gtttctttgt cagggacatg 300
gtattatata ctggtagcat ttcaattgtt gtattgggtt gaaatacttt gtccgctgct 360
gcgagtgatc atcgatgttg ccattttggt agtcctactt gttttgcctg gaaattttga 420
tatactaagt atttgtgtgc g 441

<210> 863
<211> 447
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-C5

<400> 863

ggtctagaat tcccgggtcg acgggcaaac ataagttccc gcttcaaaaa ccggtatact 60
acgtatccac tgtcctcaca ccatgcaagt cacggtaccc acattatcaa aagatagcat 120
acgcggtctt gatggcatct cggaaactat gacattactt tcaagagtgt cactactttc 180
aagagtgttc aatcacggtg gcctccgaag taccactcaa tgatataata aataaccgtg 240
atgccaaagg gccaaatttg ctaagtgggc catcgagctc tcccgttcga catcatatat 300
aaaccagggt gagccattaa gtcgcaagta ctggctgact tcgtcgccga atggacagaa 360
gcatactcca attggatcat gcactttgac gactctaaga tggtggccgg tctgggagcg 420

ggtgttgtcc tgaaatcccc caccgga

447

<210> 864

<211> 436

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-C6

<400> 864

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agggcccaaa gattggcggg ggcggcgagg agcgttgaaa gttgattacg ccatagacat 120

agagttgtgc tgcctagcct tatttcttat cctactatca tagacctttg tcaagttatt 180

accccgccct cttgaatttg caccttatct ctgaggctga atggtgttaa cgttttggat 240

tgtcttgatg agttttattta taatgaatgg ttcttatgtt ggttcttaaa aaaaaaaaaa 300

aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360

aaagcggccg ctctaaagga tccaggctta cttacgcgtg catgcaacgt catagccctt 420

caaaagtgtc acctaa 436

<210> 865

<211> 289

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-C8

<400> 865

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tcgacggcca gatcatagga tgggtgtctca tggcaaacia tccaccagggt accgtcaata 120

atgcctctca gctgcagaac ggagtggcgt gaatactact agtactatcc atgcagtgga 180

cgaatctggc agctgcagcc attcaactca ggatacttta gagggtaatg tgagctttga 240

gttaagtgtg acattcatgc acatgagagc gtctaacgag tttcaatat 289

<210> 866

<211> 247

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-020-Q1-E1-D1

<400> 866

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ttgtaaattct cgttttttatc tagtcctttc ctgtcaaacc ctgcgcgtcg cagcatcagc 120
aatagtacta ctactactac tagtgccaaa naaaaaaaaa aaaaaaaaaa aaaagaaacc 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa cgggcggccc aaaagggtca aacctaactt 240
acccttg 247

<210> 867
<211> 420
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-D10

<400> 867

accggtcagg cattccccggg tcgacgggaa tgttactgtc tacaaagctc gacttgctgc 60
aaaagggttt caacaagttc aaggaattga ctacgatgag accttctcac tcgtagcgat 120
gcttaagtct gtccgaatca tgttagcaac tgccgcattt tatgattatg aaatttggca 180
gatggatgtc aaaactgcat tcttgaatgg atttctggaa gaagagttgt atatgatgca 240
gccggaaggt tttgtcgatc caaaaggagc taacaaagtg tgcaagctcc aacgatccat 300
ttatggactg gtgcaagcat ctcgaggttg gaataaacgc tttgatagtg tgatcaaaga 360
atttggtttt gtacagactt ttggagaggc ctgtatttac aagaaagtga agtgggagct 420

<210> 868
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-D11

<400> 868

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aattttgcac ctaacttctg tttagatgtg ttttatgttt taattagtgt ttgtgccaag 180

tagaacctat aggataacct atgatgatag ttaatttgat tctgctgaaa aacagaaaact 240
 ttgcgcgcac gaaagtagtt tggtaaatta cagaaacgtg cttttgtgtt gattcttttt 300
 tctgctgatac aatagacaaa ttgtccagga cttcctattt tggtagtatt tttagagtgc 360
 aagaagtttg cgttacttac agattgctac agattgttct gtttttgaca gattctgttt 420
 ttcgtgtgtt gtttgcttat ttga 445

<210> 869
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-D12

<400> 869

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 atgaggaaat aaataataac ttttattatt gcctctaggg catatttcct tcaccataa 180
 cccacaggtc tactggatcg aaaccagact cttctttaca acccgattc taatgtatct 240
 tttgcacctg gcttcgtgtg tgattcacga gctaaatgct atactattat tcatcctgga 300
 atcaaacacc atgttattct cgttgttcaa accccattc tagcttctgt ctagtcaactg 360
 aatgattgcc taccggttg gaactttggt accatcgtgt attgcactca acgaattcac 420
 tgaaatacaa ctcatggggt 440

<210> 870
 <211> 428
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-D2

<400> 870

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 aggaacaaaa aaggggcaaa taatgacttc atgggttaag gacaggacac ctcaatggac 180
 aaggaggagc tcctttggac ccccttgcca aggcgcaatt acaagaagac ccactccctc 240

taaaaaggaa aaagaagaat gtgcacagta tgggcatga gtccttcacg aatacctgtt 300
acctccaact cacaggataa tcttgagca gccggccgta ctgccattga catagatgcc 360
gagcttggt caagtgttca gaaaacatca gatgctaagg ctggagctga acttttctat 420
gagccaga 428

<210> 871
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-D3

<400> 871

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gcgccaagca gtacgccgag gtagcatg cccaggacaa ggagttggtt cagcttaagc 120
gtgaggcccg gatgaagggt gggttttatg tcagtcctga ggccaagctg ctgtttgttg 180
tcagaatcag aggtatcaat gccatgcacc caaagaccaa gaagatcttg cagctgttgc 240
gtttgaggca gatattcaat ggagtgttcc tgaagggtta caaggccacc atcaacatgc 300
tccgcaaggt cgagccatat gttgcatatg ggtacccgaa cctgaagagt gtgagggggt 360
tgatctacaa gagaggttat ggcaagctca acaagcaaag gattcctcct gacaacaac 419

<210> 872
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-D5

<400> 872

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aaagtgtgt gacaaatttg tatcatggg tgctcttga ttgccttcct tatgtgtgga 180
ggtcgggctc acgcgatggt taactcctac caacccttc cctacgagaa tgcgtagtag 240
tactttgctt tgagggctaa taaacttttg cagtaagtac atgacttctt gatgactagt 300
gtgagtccat ggattataca cactctcact cttccatcat tgctatcctc tacgggtactg 360

tgcattgccc ttctcacct tgagagttgg tgcagacttc accggtgcat ccaaaccg 420
 tgatatacgc tctatcacgc ataaacct 448

<210> 873
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-D6
 <400> 873

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 tcttgagggg catgatatag ctctgcctcc aaaaagtgcc ttggaggccg cacacgctcc 120
 ggcaccgatc ctgactcgg agattgctgc gtcctttgag gatgaacggg tggacgtcac 180
 cttgggggct gcgatcttaa aggcgatcga gccgaacgca agccccgcac tccgcatggc 240
 ccatgactcc taggagccgg attcttctct gaactccggg ccttccgtgc ccccgccgat 300
 cgaatctgat tgggcgcctg taatggagtt caccgctgcg gacatctttc agtgctcacc 360
 ttccggtgat atcctgaatt ctctcaagtc tctctctttg tcaggagagc ccaggccgaa 420
 ctatggtctg cgaggttggg atttgacga cgaa 454

<210> 874
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-020-Q1-E1-D7
 <400> 874

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 aggcaagcca aggcgtaagc gtacgcgctg ttcctttttc ggacggttgt acagcgggca 180
 agggaaaagc caggaaaaaa aaggcggtg gttcgttttg gcgcggcccc gatcggtcgc 240
 atcgctttct tccgcggcat gggcgggcag cgatcggtcc gttcatcaat gcggtcggtc 300
 ttgtgtggtg cgttgagggg tgaggttgcg aagaaatgga aatggtgctt gctggcggca 360

cgatccggct ggctggccct tgctgccttg cctgcttttg cgtccggttt ctattaaaaa 420
 aaannnaana aaaaaaaaaa aaagcgccg ctct 454

<210> 875
 <211> 384
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-D8
 <400> 875

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 cccggacaga gatgaagggt ggaaagaggt agaggaggca ttacctcaat agaataacca 120
 ctgcagatg aaagactgca ctggtcagt attcaaattg aagtttgctg ctgaccatcc 180
 cttcttaaaa tgtttgttct tgctgctga aaacgtgggt agcagttggg aactgcaaca 240
 acatttggtg gactgttcta agcacatgga gctttgttta agatgtaatt ttgctattag 300
 aatatgctag tcccagttgc tggtataaat tacctcctgt caaagaatta ttgaggcggt 360
 tgtcaaaacc atgatctttg aggt 384

<210> 876
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-D9
 <400> 876

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 cgagcgagct tgggaaagga tgccaggtct cagttctgta tagtaggtct aggattaagt 180
 gtagggcaag gtctagactt cctccatgg ggtatggcat gatgccgagt agaagcacta 240
 catcagcgct tacgagcggc gcccgacgcc gttcagcttc gcttaccggc tgctctccgt 300
 ggtggagaga aggtgcggga ggcggatctg actccagctt ctccaataag ctcgatctcg 360
 tccttgattt ggaggatggc catcgcttag tcctattttc tcgttgctgt catggtgatg 420
 ggaacggaaa taggacgagg 440

<210> 877
<211> 469
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-E1

<400> 877

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tgaatctagg gttggagtta ctttgaaaaa tcttaaagag aaagaaccta tagttaatga  120
aaaaatagat cttgattccg ctagaattgg taaacttgag gatataatta ccaacttagg  180
ttcggcggtt tctcccatga aaaacactcc aaaaccctct acaaaaatca ccaagtttat  240
ctatgttcct aaaaataaag gtcaaacttc tagtaaggga gacgcggacc tcaaatccat  300
aagtgttcat cccaattgtc tttctatcat taaggaaact tttgctacaa atgaatttct  360
tgaatttttt cccaaagggt tattcattgc taaaaggga gaaacccta aagattatta  420
gtgctctact tatgaatcaa gtgccaaaga tggcactcct tagatctat   469
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<210> 878
<211> 439
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-020-Q1-E1-E1

<400> 878

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cagaggccgt ggtggtggtt acagaaacaa tggaaatgac aacaatgagg gaagggcctc  120
cagtcaagac cgcggtggtg gctggtctca ctcttctgct tggaatgctg ataaaaaggg  180
aagcgctgaa gacgatcaat ctttctcaaa gggcaagtcc agctggggga gtgacaacaa  240
cggtagctgg ggagctccaa aaccatctgg tggatgatgat caggcaggaa agaaggatgg  300
aaacaacacc tggagtcaaa acaagccatt ttctggcgat ggatcctcta tcctgngcca  360
gtgggctcct gctggcgggc ccaccgctgg tactgcagga tctgcaggcg gaggaggatc  420
atggggaaag ggcaatgaa   439
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<210> 879
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-E2

<400> 879

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 aaacttacca ctgccgaatg ggcaaagctt ggtcctacca ttgcaaaggt taaagctcta 120
 ctaagaaacg ggttaactgg cattgatttg gtcagggtgt gggtttcttg gtggatcata 180
 cccttgagtc gtcgcaccgt cttaatgtgc acttacactg gtggtgtaaa ggatccactg 240
 caccacagct ctgcaccatt aactaacgag gaaattaaca aaatgggttaa gtccttttta 300
 aatgaagatc cagaagattg cattaaagtg ggcctggaaa ccttctgcaa acttaaccgg 360
 ccaccggatg tgattcccg aatttaatta cctttaactc attactcaa tacttgtaa 420
 cccaaccttt gatgacctt 440

<210> 880
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-E5

<400> 880

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 agaaggttca gtagcaaaaa taactggcaa ggagggactg tttttctcag gtcatgcact 120
 agtttttgac ggtaaggaat caatgattac agctatatca gaataccag caaatattcaa 180
 gggaaagggt gtaatgatcc gatgagaagg accaaaacga agtcccggga tgcctgacat 240
 gttgactcca acaagtgcaa tattgggagc tggctctggg aatgagtgtg ccctgctgac 300
 agatggtaga ttttctgggg ggtcgcatgg atttggtgtg ggccacatat gtcctgaagc 360
 acaggaacga tgcccaattg gtcttggtga gaatggcgat acaatcacga tcgacgtcgg 420
 gaagaaagta attgat 436

<210> 881
 <211> 425

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-E6
 <400> 881

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 aagtgcatta tgatatttca cattatgacc atctgaatgc gaatgatata ttatccggct 120
 atctcagcca tgtgcactca agccgtgact tggagattga aatgggtcaag aagttgcagc 180
 tgaagtatga ggtacgttct tccaacttat attctgccag tccccaagtc ttcagattat 240
 gagaaaaccg gaatgatctg tagactttat gatataggct tagactttac ctttagattt 300
 ttctggagtt caataaaata gaacaaagct tcacctgtag tccccaaggg ccggttcatt 360
 tgaccgtaaa tgagccggtt ctttgaattt tcataaccgt ctcgtagcga actcaacaaa 420
 tattg 425

<210> 882
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-E7
 <400> 882

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 cgttcgatct gtatcccagt ttgtgctagc cttcttaagg caaacttggt taacttatgt 180
 ctgtactcag atattgttgc ttccgctaac tcgtctatga tcgagcactt gtattcgagc 240
 cctctggctt gtattatgat gcttgatga cttatttatg ttgtagagtt gtgttgat 300
 atcttcccgt gagtccctga tcttgatcgt acacatttgc gtgcatgatt agtgtacggt 360
 caaatcgggg gcgtcactgc tgcacacgga agtttctagc atgaataatc ttatgatccc 420
 tttgagagtg ggtggcattc cata 444

<210> 883
 <211> 466
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-E8

<400> 883

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tgacaagcaa gcaaactaac acacaagcaa acaaaaagca agcgggcaaa agaggcaaatt 180
ggcgaaagag agggaggata gaaagagaga gagggcaaatt aaaacggccg gggagaagtg 240
gcgagcatg tcggatgagg agaaggcaaa gtatggcggc aagaaggcag atgccccagc 300
aagcaaggtg gtgaacaaga aggagagcac cagctccaag aaggccaaga ctgacgctga 360
cgaagaaggt tctgacgttg aggatgatgc cgaggaggac gaggagtaaa tagtagatga 420
gggaacagca gcggtgcaaa tcagcgtttg ctgcttaagg tttagc 466

<210> 884

<211> 449

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-020-Q1-E1-E9

<400> 884

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aaaaggagct tgatgctctc ctttctgatg attccttggc aaatgtccca tttctcatcc 180
ttggcaataa gattgacatt ccatatgcag catctgaaga agagctgcgg tatcacctag 240
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gggtctccca gtacatcaag tanggctcac agacgtcaaa ttttcttgct atcggttggt 420
tgtttgctcac gacagcaaatt gatatcatg 449

<210> 885

<211> 465

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-F1

<400> 885

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tgagatgac tcaacttttag ttaaaaggcg tctaacgat tcagagtttt tagatcttga 180
tactaaatth ggtaaaagtg ggactggaga ggtcaaaact ttacatagca ttgaaccac 240
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tttgcaatct gtgatgaatt ctctcatgc ttatagtcaa aataaagctt ttaccaaaca 360
tactggatg gccttgatgc aatcttatga agaaaaactt gaatcgaaag tttctatacc 420
tagaaaaactt tatgatgagt gggaacctac tatcaaaatt aaaat 465

<210> 886

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-F10

<400> 886

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tgattcgatg tttacggggt tgaaaccttc tgggatttta tgatccatta cttcattcgt 180
gaagcatagc ggggtgtgcg cgcctctgta ctgggctata tcacgacgta gtcggaagc 240
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acatgccgta gggcgctgt gcgatccgta gatcgatttt gtttgccttg cttatcctc 360
cagtatgtct cgcaggtcgg ggcattttc cgtgcctta gttgagcggc gtcggggcat 420
ggcttggg 428

<210> 887

<211> 451

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-020-Q1-E1-F11

<400> 887

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 ctgcttcgca aggagatgag taccgagaga gttgcatcta gagaggaggc taagctagag 300
 caactgggtgc tagactcgaa cactccactg tatgatggtt gcaatcctga ggtgacccgc 360
 ttgagtttca tgctccaact cctgaagacg aaggctaaaa acanatggac cgacactagc 420
 ctcgatgagc atctcaggta cctaaaggat g 451

<210> 888

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-F12

<400> 888

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 ggataacttc ctcggtgcctt actttcccga gtaagtcctc ccctcaaccg ccccgtaaca 180
 tatgaattct tagatttcga tcgtttttct tttaacattc cgtgttttct gcagtgcac 240
 acattgcacg ctcatcctcc taagcccaa atattccatg gccacgtatt tcgactcgga 300
 ccgtcagtcg aacgtagact acacaaatgt caagaagggt cttgatgatg ttctccccgg 360
 ctacgtcaaa tctggaggca ccttcaccag gcctattcgt aagtacggca agcacgtggt 420
 ctcccacaat acgacgt 437

<210> 889

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-F2

<400> 889

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aaaccgtccg tggcggaat caacatgtta agccggataa agggcagcct cgggaggcac 180
acataaagca atatgggtga aggagttcaa ccaccgacct aggagtcaat accaatgcgt 240
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agtttcaaaa gaagaccaag gacaacaagc ctccctcaa ctccaatcgt gaaaatgttc 360
aagaatgaga cgtagagaat tgtaaagtac atacggacct gaataataa gattcggtga 420
acaaacctct cctagagca aaacatgac aacaccagaa tg 462

<210> 890
<211> 467
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-020-Q1-E1-F3
<400> 890

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ggactgggaa ggcaacttcc ccacatccgt gacagatccc cagccaatgg gcaaggtcgg 180
catgtgcttc caccctgac aggacaggat catcactgtt cgtgaatgcg cccgatccca 240
gggcttcct gatggatacc atttcgctgg caacatccag agcaagcaca ggcagatcgg 300
gaacgtgtg cgcctcccc tctcctatgc gctagggagg aagctcaagc aagccatcga 360
cgccaagcct cgactggctt aagttcactg cactgcatga tacaagtccc gtcatttttt 420
ggttggtccg agtgggactt aattcatcat tggcccctat atgtatg 467

<210> 891
<211> 423
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-020-Q1-E1-F4
<400> 891

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 ggcccgggta aaggttggtt ccaagtcaat cctgaaggca aactgccggt tggtttcaaa 180
 aaccaaagga acaaatgcaa tgaaccaaag aacaaggaaa ttcttgacc tgttgctttt 240
 gaaacagata ttcattggat tgtccctgaa ggtaacaag gcaacaatca acatgctccg 300
 cagggtcaag ccatatgttg catatgggta cccgaacctg aatagtgtga gggagttgat 360
 ctacaaaaga ggttatggca agtcaacaa gcaaaggatt cctttgacca acaacaaagt 420
 cat 423

<210> 892
 <211> 461
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-F5
 <400> 892

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 agcttatgag atttcctgtt gagttttgtg ttgtgaagtt ttcaagtttt gggtaaagat 120
 ttgatggact atggaataag gagtgccaaa agcttaagct tggggatgcc caaggcacc 180
 caatatattc aagaatagcc aaaagcctaa gcttggggat gccccggaa ggcacccct 240
 ctttcgtctt tgttcattgg taactttacc tggagctata tttttattcg ccacatgata 300
 tgtgttttgc ttggagcgtc gtgtatgata ttagtctttg ctttttagtt tacctaatca 360
 tccttgctgt aacacacctt ttgggaggat cctacttggg tgaaatttat tagaatactc 420
 tatgtgcttc acttatatct tttgagctag atagtttttg c 461

<210> 893
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-F6
 <400> 893

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 tattgccagc cttcctgttc cgcgtccaga gggagctcac cccgataaaa caggcagcgg 120

caagtttgtt ctttcagtgg cctggagtcc agatggcaag ctcttagcat gtggatccat 180
 ggatggcacg attgcggtgt atgatgcggt ccgcatgaag ttcctccacc acctggaggg 240
 gcaccacatg ccagtgaggt ccatggtgtt ctgcgcggtg gacccccacg tgctcttgac 300
 cggatgtgac gactcccaca tccacatcta cgatgccaaag gagaagggcc tgatcggggc 360
 catgtcgggt catgcgagct ggggtgctgag catcgacatg agcccggatg gcatggcggt 420
 ggcgacaggc tccagcgacc gcaccgt 447

<210> 894
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-020-Q1-E1-F7
 <400> 894

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 gcacaagtgt ggtaaaagga tagtaacatt gcccttctc tctttttctc tcattttttt 120
 gggccttctc cttttttggc ctttctctt ttttcgtccg gagtctcatc ccgacttggtg 180
 ggggaatcat agtatccatc atcctttcct cactgggaca atgctctaata atgaggatc 240
 atcacacttt tatttactta caactccata ttacaactcg atgctagaac aaagatatga 300
 ctctatatga atgcctccag cgggtgtactg ggatgtgcaa tgatctagcg tangaatggc 360
 ataaaaacgg acaagccatg anaacatcat gctagctatc ttacgattat gcaaagcaat 420
 atgacaatga atgcccaagt catatatata tg 452

<210> 895
 <211> 116
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-F9
 <400> 895

taccggtcag gaattcccgg gtcgactggg atcaagagac cgcgtgggag gccgagaaag 60
 gagagaccgc cagaagaaat gtctacagaa actggagatg caatgcctgc tcctga 116

<210> 896
 <211> 438
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-020-Q1-E1-G2

 <400> 896

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 ataaaggggg aaaaattaaa gtcaggcaat ttgggtaatt gtggaaactt gtgttgatg 120
 tttgcaagtc ccgtagcatt aacatatggg aaactttgtg tgacaaattt gaaccatgag 180
 gtgttctttg attgccttca ttaggtgtgg aggtcgggat cgcgcgatgg ttaactccta 240
 ccaacccttc ncctaagagc atgcgcgtag tgcttaattt tgatggcttt tagaattttg 300
 ccataagtaa gtgagttctt tatgactaac gttgagtcca aggattatac acactctcac 360
 ctttccatca ttgctagcct cttcggtaac gtgcattgcc tttctcacct tgagaattgg 420
 cgcaaaaatt gccggtgc 438

<210> 897
 <211> 450
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-020-Q1-E1-G5

 <400> 897

ccggtctaga attccccgggt cgacgggaaa atatatgtcc atgcattgga agatttacag 60
 gctcaagcag aagttgctct atgcttctgc tgtgtcaagc attagctgta agcaacttgt 120
 ctttttcccc acgtgttccg gagttggaac tcgatgcacc attcagcttg cactgttaac 180
 accatttttg aagatggatg taactgacaa acaccctcc agtagttgca gccttgctgg 240
 aaggatggat tcaggtgtgc atcctgacag tcactatcac ttttgaagat tgatgatgta 300
 cctgcaaacy gcttcgttaa ttttaggaag gatggagtcg tgcattggact ggatcctaac 360
 cgactgacat gaaaacttga ggctattaca cggattcagc gttgaaacac ggctttgaag 420
 tcggacgtgt gccttatgat tttttgtggg 450

<210> 898
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-G7

<400> 898

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 aagagcggca agtacacgct cggctacaag accgtcctca ggaccctcag gaactccaag 120
 gcaaagcttg tgatccttgc taacaactgc cctccactcc gcaagtctga gattgagtac 180
 tatgctatgt tggcgaagat cactgtccac cactaccatg gaaacaatgt tgatttgga 240
 actgctgtg gtaaatactt ccgagtctgc tgctgagta tcatcgaccc tggcgattcc 300
 gacatcatca acgcaacacc agctggccag taaacctgtg catgccattt tcagtgtctc 360
 gtctgatgcc attttcttgc tggacttgat ttggtcttgt gtacatcatt tatcagtcaa 420
 tcaagtttga tgggact 437

<210> 899
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-G8

<400> 899

ggtcaggaat tccccgggtcg acgggatgtg cttcacttat atcttttgag ctagataatt 60
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 ttattaatct atcatgcttc acttatatta ttttgagagt ctcttagaac aacatgggtat 180
 ttgctatggt tataaaattg gtcctagaat gatgggcatc caagttaggt ataataaaaa 240
 ctatcagagg aagtgaattg gatgctatga tcaatttgat acttgataat tgttttgaga 300
 tatggaggca gtgatattag agtcatgata gttgggtgat tatgaattta aagaatgctt 360
 gtgttgaagt tggcaagtca tgtagcatc acgtatggta aaagttgtgt aacaaatttg 420
 aaacatgagg tggtcttaga ttgtc 445

<210> 900
 <211> 421

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-020-Q1-E1-G9

 <400> 900

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 agctcaagca gaggggtctcg gctaattggcc gtgtgggtgc cactgctgct gtgtactctg 120
 cagcaatcct tgagtacctt actgccgagg tccttgagct ggccggcaac gctagcaagg 180
 atctcaaggt gaagcgtatc acccctcgcc acctgcagct tgcgatccgt ggagatgagg 240
 agctggacac cctcatcaag ggcaccatcg ctgggtgggtg tgtcatccct cacatccaca 300
 agtcactcat caacaagacc tccaaggagt gaatgaaatg caataacggg tagttgttgt 360
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 c 421

<210> 901
 <211> 393
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-020-Q1-E1-H2

 <400> 901

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 atgacaattg agacgagacc tgattattgc ctgnngcctc atttgcgga gatgctatct 120
 tatggatgta cccgcttaga aattgggtgtt cagagtacat atgaggatgt tgcacgtgac 180
 acaaacagag gccacactgt agctgctgtt gctgattgtt tttcattagc aaaagatgct 240
 ggttttaagg tggttgcgca catgatgcca gatttaccta atgttggagt tgagagagat 300
 atggaaagtt tcagagaatt ttttgaaaat ccaacattcc gagcagatgg tctaaagatc 360
 tatccaactc ttgtgattcg tggaactggc cct 393

<210> 902
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-H3

<400> 902

attccagggt cgacgggcta gctacaagct atggacccga aggttgaagt aaactactca 60
cacttcatcg gaagggctat ggtgttgatg tagaagccct ccgtgatgga tgccctcgcc 120
aacagagctc cggaacaagc cccaagatgg gatctcgtgg atacaggaag ttgcggcggt 180
ggaattaggt tttttggctc cctctttggt ctaatggggg tacgtaggta tatataggag 240
gaaggagaac gtcggtggag ctccgagggg cccacgaggc atggggcgcg cccagggggg 300
cgccctcaa cctcgtgacc tccctgaaa cttcttgag taaggtcaa gtctcctgga 360
tcacgttcag tgagaagatc acgttcccga acgtttcatt ccgtttggac tccgtttcat 420
attctgtttc ctcgaaatac tgaaatag 448

<210> 903

<211> 324

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-H5

<400> 903

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ccgaaaccgg cgaccatggc gaacgagcag ccggcggaga cctacacggt ggaggagctc 120
gtggcgggtga acccctacaa ccccgacatc ctcaacgacc tcgaggtctt tgtcaacgac 180
caggtttctt ctaaaacata taacctggat gcaaattctca gccttcgacg cctttaccag 240
tttgagccag aaaggttgag cgtgcaaatt gtagcccga tattgattaa agctctcatg 300
gcaatgccgg ccccgactt cagc 324

<210> 904

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-020-Q1-E1-H6

<400> 904

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gaaaggaaag ggggaaaaag agggagagaa gcaaccgtga gtactcatcc aaagtactcg 120
 caagcaagga actacactac atatgcatgg gtatatgagt aaagaggcat atcagtggac 180
 tgaactgcag aatgccggaa taagaggggg gataactagt cctgtcgaag actaagcttc 240
 tggacatctc catcttgcag catgtacaag agagtagatt ggagtcctcc aagtagcatc 300
 gcatagcata aacctacccg gcaatcccct cctcgtcgcc ctgtagaga gcgatcaccg 360
 ggttgatatc ggcacttggg acggtgtatt ttattcagta tccagttcta gttgtcataa 420
 actcacgga caactccggg tcgt 444

<210> 905
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-020-Q1-E1-H7
 <400> 905

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 taaaagcaaa ggaaaaatag atcataaagg caaatatatg agaaagaaga ccagagggcc 180
 gtaggtttca ctagtggctt ctctcgagaa aaatagcaaa cggtaggtaaa acaaattact 240
 gttgggtaat tgatagaact ccaaatactc gtgacaatat ccaagcaata atcattatat 300
 aggcatcacg tccaagatta gtagaccgac tctgcctgc atctactact atcactccac 360
 acatcgaccg ctatccaaca tgcaccaatt gtataaagtt catggagaaa tggattaatg 420
 caataagaac ga 432

<210> 906
 <211> 503
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-021-Q1-E1-A11
 <400> 906

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 cgcgatccc gcctaagatt aaggtcttcc tatggcaact atgccaagat cgccttcta 120

cggtccagaa tatccccgggt cgacggggcgg cggcttcac caccgtccgg tcccatgagt 60
 cgagtcgaaa gtagtgatgc tatgtgtagt tctgaaacat tgattagctc atgttgtaat 120
 tataacttta tgaacttgta tgtctctttg gtttgacag tcgttcaatt tagatgtaat 180
 cgatgctatt tattagtagg accatgaatc gtgctattaa tttcttgctt ttctcttccg 240
 atccttttgt tgcatactta tatattgctt atgtattgtc tgttggtcgg ctagtgcata 300
 gagatgccgt cgtatgtcgt gtacaagggt aagggtcccg gagtctacga cgactgggag 360
 gagtgtcgga gacaggttca ccgtttcagc ggtaacagtt acaaagggtta caccactang 420
 gcggaggcag aatctagata caccgcctat ct 452

<210> 909
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-A6
 <400> 909

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 gtgtttccag catcgagcat gcatagacgg atgatgacaa agttgacgaa gcgccgcact 180
 agccttgcca ggcacgggga tacgtcatgg acgaaggga acatcggtat tgctagcatc 240
 aagcatgtgt agatgtggga cttgcacgag ctgtacgcct tgttgaggag tcggagggcc 300
 agtagagaag aagactcaat aatgggttgc gtgccaatca gcatggggcc gatgtcgcca 360
 ttaatagtcg gactagacga agtggtcagg gtagatgatg gcgacgctgg tgacaggctg 420
 gtgctcgatg aagatgaagg ggggttga 448

<210> 910
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-A8
 <400> 910

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cgggccagaa ttccccgggtc gacgggggtgg tcgaacatgt ttagcccact gggcggcttg 60
gacgcgcatg cacgaaggta cgcatacgc acccgccaca cgtgcatggc atgatgggcc 120
atcaagtgga tgaggatgatc ctgcacctcg tcacgatcga cgcactcgtg ctctaaccag 180
ctcgctgac cgcccatgtc tctcacgctt cgacagaaac actatcgaca cctcgaacat 240
cattgtggag gacactatac cgcttatgaa gctccgtgga ctcacgctca tacacgccga 300
gcattgtact ccgctcatcc tttagctcac ggatctccac atcgttggcc tcgagcttca 360
tatccatgcg cagggattcc tgtgtcaggc gcctcaactc agggaccgtg gtctaattggg 420
ccaa 424

<210> 913
<211> 404
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-B3
<400> 913

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gcacctagtt tgtatgttgt tttcctttat gttagttagt aaaaccattg ttttggatct 180
gtaaagaaaa gtgttagtag gttaaaacta cttctttggt gttgcttgat gtgatggaaa 240
ccttgatttt gttttcctcg agttttcttt gattttgggt tgagtgcttg tgtgttttcc 300
ttcagtttgc tgatatgtca ttagtgaaat acttatttgt gctattgttt gacttgatag 360
aatttccgga gtgcgaagct tgctatctcg agtcactagc gttt 404

<210> 914
<211> 434
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-B4
<400> 914

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ggactccccg tgtggcgtgt tgagtgattc ggctaagcaa ctagcgagta gtagtagtaa 120

actctgcata ttaggtttga ccgaagtcaa acttcctaaa gtttgaccaa gtttatagaa 180
 aaatataaac atttaccata acaaatatgt atgatgtgaa agtacattca ataatagaatc 240
 taatgggtatt tatttgttat tgtatatgtt aatatttttt gttataagct ttctgagagt 300
 ttacaaaact tgactttgac caatgcta atcgcgactt aaataaaaac ggagggagta 360
 cacatttgtt ttcttagttt ttagtgaact aatcatttgt tgaaattgtg aaataaatat 420
 attaggctat tgac 434

<210> 915
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-B5
 <400> 915

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 actacgagaa gcacaagtc atgtgtaca gcctccatgt ccatgtcctc cctttcttca 180
 ggttctacag gggagcccag ggcagggtca gcagcttcag ctgcacaaat gcaaccatca 240
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 gggggctcga ggaggcggag ctcttggtc tggcgcaaa cagggacctg gaattcacct 360
 acaacgagaa gccgacgtg gtgccgatcg ccgaggctat ccagatggaa gctgcctcca 420
 ttggcgcccc atggatgcca ttgcccgcg gcgc 454

<210> 916
 <211> 455
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-B7
 <400> 916

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 tttattgcat gggacctaag catgcacca aggacacaaa tttgattttt cgaccaattt 180

atatgcactg gagcatgtgc atgtagttca attttgaatt atgcacataa aatgcattga 240
aaactcaatt aatgcataaa aatgtccaaa cgaaccccgga aaaatcacia aaaatcacac 300
aacactcctg ttgttctatg ttgacacgat taaaaatatt tgaaagcaat aagaggccat 360
ggatattgtc tcatccacaa aggtggggcg ttccgtaccg aaaaccatca tgcttgcgt 420
gagaagctcc ggtttgtgag aagtatatac tcaaa 455

<210> 917
<211> 502
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-B9
<400> 917

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caaggactga aaggcttcat tgctgatgaa ataagttatc tgacagactt ggtaagcttg 180
aacttgagct ctaattcctt gaccggaagc ttgccaccag gtttaggcca accttcactt 240
gcgacactgg atctgtcctc gaaccagttt actgggagta ttcttggcac cataggctcg 300
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ctttattcag ttggcgtgca tgggtggcgtg atagatctgt caggtaataa aggcctatgt 420
ggggtgccta ccctacctgc gtgtgcatta ttctgggaga aaggaggctt gaataaaacc 480
ggcaaaattg cacttggagc ct 502

<210> 918
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-C1
<400> 918

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aagcaggtgc accccgacat cggcatctcc tccaaggcca tgtccatcat gaactccttc 180

atcaacgaca tcttcgagaa gctcgcggc gaggccgcca agctggcgcg gtacaacaag 240
aagccaacca tcacgtcccg ggagatccag acctccgtcc gcctcgtcct ccccggcgag 300
ctcgccaagc acgccgtctc cgagggcacc aaggctgtca ccaagttcac ctctcttag 360
gctgttcgtc ttctgtgtc tctagtag ctgttcgggt gtgtttgtgg ccgtgttacc 420
ctgtaagaat cgcaccgca tgttt 445

<210> 919
<211> 504
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-021-Q1-E1-C10

<400> 919

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agcctgtagc agtaatacta caagcgatcc tggcacttct gaagctaaga ataacaacgg 180
caggccctga cgcaacaaac acaagcgccg catcaataat gacaataccg aagacatggc 240
ggtcaacgcc agatttagcg gcactaggac cggtcagcgg aagaagccat tcaaaagaaa 300
tagagagggc tcatccagcc tggaccgaat actcgatcga ccctgccaga ttcattggccc 360
ctccgctaac ctgtctatca tactaaccga agttgttggg tctttaaaca ggccgataag 420
ttaaatactg agcataacga gaaagggctg ccgagcgagg acgacgacga ggagcctcgt 480
caaccacaca ctgggggaca gaag 504

<210> 920
<211> 497
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-C11

<400> 920

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tagaaacggg gccaacatac gtggaactta cggatatctt gatccggagt acgtgtcctc 180

acgatcattc acaaagaaga gtgatgtgta cagctacggt gttctgctat ttgaacttat 240
 tgctggcaga aacctcaac aaggtctaata ggaatatggt gagcttgctg caatcaacgc 300
 tgatggcaag actgggtggg aggaattgc cgactctcgg ctagaaggcg catttgatgt 360
 ggaggagctc aatgacatgg ctgccgcggc ttacaaatgt gtaagccgtg tctcccgaaa 420
 gcgaccgtcg atgcgagatg ttgtccaggc actgatccgg gtggtgaaac acagccacag 480
 cagcaggaat catcatg 497

<210> 921
 <211> 499
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-C12
 <400> 921

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 tgcgccagac cggtgtgtaa ccagttcaa gtattgtggc ttggatgggg catccggcat 180
 tagttgtgag gtgttgggtgc aatgtctgtt tggattagg cttggacatt cgtcaccct 240
 tcatcacggg tctaggagta gcaacatgta ttgtcaagat ggtggcttca ggcttactga 300
 tgtattacct tataacgact ttatgaataa ttaataaaat ggctgcatgc atcgcccaga 360
 tgcagatgca gaggcagggg ccagggggta taccctcctt ttcaaaaata aaataaaatt 420
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<210> 922
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-C2
 <400> 922

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aaaaccaagt gaaggcatca gaccttgaga aggctgctac gacgagaaag gacctccgct 180
 ctgctatgag ggcaaaggag gagctgcggg aagccgggga tattgtagct gggaaatcct 240
 ttatgttggt gaggatgttc ggagatccac ggtatgcccc tctagatcga ctatggagtt 300
 cgtaggatgt atatatggat ttggcgggtga gcgctgccga tgcggccaag tatttccagg 360
 gtcagacgga ccgtgaagta gaccatctgt tttggagaca atatcattcg cccgagcgtc 420
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<210> 923
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-C6
 <400> 923

gtaccgatcc agaattcccg ggtcgactac attacacttc accatatttg ggcctaaggg 60
 aacgcattgt ggagtagcaa ttagatgatg ggttgcgaga gtgacagaag cttaaaccct 120
 agtttatgcg ctattccgta agggaccgat tgaatccaaa agtttaatgc tatgggttaga 180
 atttattctt aatacttttc tcgtagttgc ggatgcttgt gggaggggta atcataagta 240
 ggaggcttgt tcaagtaaga acaacaccta agcaccggtc caccacata tcaaattatc 300
 aaagtagcga acaaaatcaa accaacaatg tgaaagtac tagatgaaaa tcgcatgtac 360
 cctcaagaac actttgctta tcataagaca ccattttggc ctgtcctttg cctcaaaagg 420
 attgggatac cttgctgcac atttg 445

<210> 924
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-C7
 <400> 924

gtaccgggtcc agaattcccg ggtcgacggg gtcattttat tttcttttgt tttgcttgct 60
 gtttgaataa aataccaaga gctgaaatta ttaaagtgtta gagagtcttc acatagttgc 120
 ataattattc gactattcat tgatcttcac ttatatcttt tggagtagtt tgtcatttgc 180

tctagtgcctt cacttgatc ttttagagc gcgatggtag ttttattttg aagaaataga 240
 tgaattctca tgcttcactt atattatatt gagagtcata aacatcatgg taatttgctt 300
 tggttatgaa tttagtcccta atatgatggg catcgaagag ggatataata aaaactttca 360
 tataaagtga attgaatact atgagaagtt tgatacttca taattgtttt gagatataaa 420
 ggtggttaata ttagagttgt gttagttgag t 451

<210> 925
 <211> 444
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-C8
 <400> 925

gtacggtcaa caattcccgg gtcgacgggg ggcaagagcg ccgtgtagaa gggttccaag 60
 ggcccaaaga ttggcgggtgg cggcgggaag cggtgaaagt tgattacgcc atagacatag 120
 agttgtgctg cctagccttg tttcctatcc tactatcata gacctttgtc aagttattac 180
 cccgccctct tgaatttgca ccttatctct gaggctgaat ggtgttaacg ttttggattg 240
 tcttgatgag tttatttata atgaatggtt cttatgttgg ttcttaaaaa aaaaaaaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
 aaaaaaaaaa aaaaaaaaaa aaaaacaaaa ggataaaaaa aaaaaaaaaa aataaataaa 420
 aaaaaaaggg gcgcccccaa gggg 444

<210> 926
 <211> 521
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-021-Q1-E1-C9
 <400> 926

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 acagatctga cgagaaaaca gcgaacgaaa aagagggcga ataaaacagc aaatttttgt 120
 gaagtgggga gaggaaaatg agtggcaa at ggaaaataat gtgaattgca aggagatgag 180

atttgtgatt aggaacctgg tagatgttga tgatgtctcc ccggcaacgg caccagaaat 240
 tccttttgat gtttgcttga actacgtcgg tatttcccca aagaggaagg gatgatgcat 300
 cacaacaacg gtaggtatatt cctcagtga tgagaccaag gttatcgaac cagtagaaga 360
 accacacaac accacataaa cagctcctgc atacaaagaa caaataacttg caacccgacg 420
 taagagaggg gttgtcaatc cctcacgggt aaaaagatag ataaaattgt agtagattgg 480
 ataaatagat ctcgcgggaa cgtgagataa aataaataac a 521

<210> 927
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-D1
 <400> 927

ggtccagaat acccggtcg acgggaatgt tactgtctac aaagctcgac ttgtcgcaaa 60
 gggttttcga caagttcaag ggattgacta tgatgagacc ttctcacccg tagcgatgct 120
 taagtctgtc caaatcatgt tagcaattgc cgcattttat gattatgaaa tttggcaaat 180
 ggatgttaaa actgcattcc tgaatgggtt tctggaagaa gagttgtata tgatgcaacc 240
 agaagggttt atcgatccaa agggagctaa caaagtatgc aagctccagc gatccattta 300
 tggactgggtg caagcatctc ggagttggaa taaacgtttt gatagtgtga tcaaagcatt 360
 tgggtttata cagacttttg gagaagcctg tatttacaag aaagtgagtg ggagctctgt 420
 agcatttctg agattatatg tggatgaca 449

<210> 928
 <211> 508
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-021-Q1-E1-D10
 <400> 928

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 ggaggagtgc gatgggagga gttagggttt ggttggtcgg gctgcggggtg ggggtggggg 120
 ttaccctttt tcttttcttt tttctttttt ctgaagatag atggatggat ggacgtggga 180

tggagagatg gatggatgga tggggccatg tcatcgatcc gtgtgacagc taattccacc 240
aatgagaata gaggacgtgt aaatatgttt ttcctttagt ttttttctaa tttttcatat 300
gaaaaattca aaaaatgata tcatattata cacaggggtg cattttgtaa tggcaaacag 360
tgttgcctaa ggaagttttt attttctatc cacgaaaaat tcatttccca tttttcgagt 420
gcccaaagtg agtttttttg tgaaggggac tacatacatt tggtgcaa at ttgtaccaa 480
tctattttcc aatatactag gacatatt 508

<210> 929
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-D4
<400> 929

cggtgcgacc ggggtaaagc caatgattag aggcacggtg gacgcaacca ttatgtgcat 60
gtgcagatat ctgagtggaa cttcattttt tttccagttc aacttttgaa tgtgtttcag 120
ttcgtctact tcccggtcgt cctgagctgg agaattgctg ctactgttta tgtgtttgca 180
aatttttgaa aacaagcttc agtacaagaa aaatgggtgg tcagtccagc tcctgcaacc 240
aacacaggtc gttgccctt ttgccacaac ggtagcagca caaacattag tgtgggtcatc 300
ctcaaccagt ttctcacgag gcctccccgc aagccctgct catgatcagg ataacctcga 360
taggttacac atgttgctca cgaagctgat aggttccaca tggtgcccag gagtataccc 420
gtatggagcg gagatgac 438

<210> 930
<211> 376
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-D7
<400> 930

gtaccgggtcc agaattcccg ggtcgacgag gattcaaagc tgagccacga aatcggtttg 60
gagttgagca agatgagtgc ttccgccgga ttaagaccaa ttggagcagt ggtctttatg 120
caacgtggac tgctgaagat ttgcttgagg actacagaca atacaaccaa cacagcagag 180

atcgccaagg catatggcgg aggtggaaag gcgagctcaa gttctttcgc actaaggatg 240
gacgagttca acgcttgat tagggagaac acatgaaccg gcctggaatg ctggatggca 300
atctggtgta tcatatcgta acatgcgtgc atgcctagtt gcgaggaaga tgtgaaaaat 360
gagcagctga tgttgg 376

<210> 931
<211> 457
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-D8

<400> 931

gtaccgatcc agaattcccg ggtcgacggg tttcaattga cagcttattt tcattcaagc 60
aaacatgtcc gacgcttggt agacatgacc gtgcattgtc ccggggctga actaaactgc 120
gaggagattg gtcattatga ttcattggctt gaggatcttc atactgtcaa gacaaattat 180
tttcttggaac ttaaaaatct tagtactcaa aacgtgacgac cgatagtgtt cgtattgaac 240
tatggtcaca tctatttagg aaagatggta aaatgtttaa tatttggtccg cagtgcattc 300
tttgcataca ttatttttta agctaaactt cattgctaag tatgttaata tacgatgttc 360
ttcaacaggg actcccgatg aatgttgtgc ctcatggat cgagactaaa ggtcgcatga 420
gaatgggtta cttacgacca agatattcta caatgca 457

<210> 932
<211> 505
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-021-Q1-E1-D9

<400> 932

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ggggtgctta actcgtgggc gtcgaacctg gagaagctgc tggacctggt ggagaagagc 120
tgccacaaaa tacacaagga gacgatgatc cacaaggcgg tgctgaaagc ctgaagtga 180
ccattttgaa ttgaatgtgg ccttggttag gttgtgtgcg tagtagactt tctctatgga 240

tctgaattca ctttactgt atgggtaaaa ctattctctc tgctcaggtg ggcatcgcct 300
 gtttgctttg ggaactcgtg tgcgaaccgg tctcgaaata ctgtaaccac agggaatgac 360
 gaatgctatt tgctgtattt ttctgaacat tagttgtatt ctttggcatc aactcttgct 420
 gaacctggat gtatctgctc atcagagcgt agagccagtt tctgaatgat ttgctgggag 480
 acgcgcttgt tccgttttga gtggt 505

<210> 933
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-E1

<400> 933

ggccagaat atccgggtcg acaccgtcat cgccgtcatc aaagagtctg tgaagacatt 60
 cacatatgag acattgaaca acattgagag attgataaat ggaatatcag cactcttggt 120
 gacactgtta cctggaaaag ccaacatttt ggaaggggtc agtggctggg aacttaggcc 180
 agcatttcgc gggccacgtc ttctcgttg gatggaaagt ggggtctctt catttaacga 240
 gttcattcac gaactttctg ccgattcgga gtctgaatca attgctggct ctgtccctgg 300
 ggatgatgac aatgaagagt ttgtctgccc tctttctccg ttgtcccaa gttcacgatt 360
 gtcacacaca agcagctttg gtagacatga ccgtcgattg agaaggccta tcaaatatgc 420
 agtttctctg attaatggg ctgtgaaaaa tttccct 457

<210> 934
 <211> 506
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-021-Q1-E1-E10

<400> 934

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 aacgcaaagc taccaaagca ggttctgct actgaggagc agaagtggct cattgagccc 120
 acgggaaaag agtaagtggg tcattatttt gcttgtcaca tgcttattcc ggttggtatt 180
 tattttgctt gtcacatgct aatagttcat tcttttgcag caactggata tattctaaag 240

tgtttaaggc tatgttttta tactttctccc cgaaaagttt eggtegtcgg cttcagcccc 180
 ctgcggtata acacgggggt gtttggaata gcacttgatc acacttgacc caacgtcttg 240
 gtccgttaag gaggtgtag tgccgcaaac taggcaatcg aactatagag ctttaacact 300
 ttcacttagc catatgagtt tgacagtggg gctactatat agcccctggg atgtccgtgg 360
 ttattcaaat acggtgcgta tacatacgtg accagaagga eggtecttcg cttaacacga 420
 agggaatcgc gaagattctg atgagtcac gagtggttga ctagctctca ccgcatcatg 480
 acagtc 486

<210> 937
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-E2
 <400> 937

ggtccagaaa tcccgggtcg acgggatgtg tcccctatta aatctttgtt ttgcaatatt 60
 aatattgatg aaactgaata tgatcttctt ttacctagaa ggcgttctaa aaattcggag 120
 tatttagatc ttaatgatga aattgatgaa agtggaattg aaagaaataa aaatctagat 180
 gttgctaaac ccactatatt ggatttcaag gaatttaatt atgaaagttg ctctttaatt 240
 gattgtatct ccttggttgc atccatgcta aattttccac atgcttatag tcaaaataaa 300
 gccttcaccg aacatattgt tgatgccctg atgtaatctt atgaagaaaa acttgagttg 360
 aaagtttcta tccctagaaa actctatgat gagtgggaa caactattaa aattaaaatt 420
 aaagatcatg agttttatgc tttgtg 446

<210> 938
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-021-Q1-E1-E5
 <400> 938

gtaccggtct agaattcccc ggctgcacggg gaagaatttg gaggccatgg cgcgctgctt 60
 caggagggga tgtttgcatc tttcaccctt ttctgcttt catggattct tgtgtacagt 120

ttggctcact tttgatgaga agtcctttg ttgaacatac cgtgatatgg gatcggattg 180
gcggaaaaaa attcaccaga actctgtaga ttattgaaga gccctagaac agcattgtat 240
ggaatcgggt caggcagtca tgttgtctct gaatcccagt gtaattttga tagaacatct 300
tagcatacca gttgttggca gaacatgttc agtatgcttg acatgtaact attggatatc 360
attctcttat gtcgattcaa taaaatgttt taacatgaaa aaaaaaaaaa aaaaaaaaaa 420
aaaaaagcgg ccgctct 437

<210> 939
<211> 204
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-E6

<400> 939
gtaccgatcc agaattcccg ggtcgacggg gaaaaaaaaa aaaacaaaaa aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa accaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaagcggccg ccctaaaggt tcaaagctta cttaccctg catgcaacgt cataccctt 180
caatagtgtc accaaaattc aatt 204

<210> 940
<211> 427
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-E7

<400> 940
gtaccgatct agaattcccg ggtcgacggg gtttgaata gatgcaacga tgggtgctgag 60
catacttatt gtatgcgggt aatgatggaa aagggtcccg atggtgattg gttttgtgaa 120
gagtgcctaa ctgaagtaga atttgaaaag gagaagttag aaaaacctca ggtgaagctt 180
gtcacttcaa aggaagaatc tgttcaaggg aaaattagta aacctttcaa tgatgcaaac 240
agcagaagtc cttgtgagaa tgaagtggag gatgaaactg ttggcagaaa agaacggaat 300
gaagcaaate aaggcattga tatggttgaa gatgcaaaga ttccgctgt ggctaaacaa 360
aatattcctg aaccgggtgg tttatcaatg gagtcttact ccagaaaagg aatacctctg 420

ctatgcg

427

<210> 941
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-E8

<400> 941

gtaccgagtc cagaattccc gggctgacta catggcactt caccttatta gggcctaagg 60
gaatgcattg tggagtagtt attagatgat tgattgagag agtgacagaa gcttaaacc 120
tagtttatgg gctacttcgt aagggtattga tttggatcca aaagttaaat gctatgggta 180
gattttatct taatactttt gtcgtagttg aagatgcttg tgaggggggtt aatcataagt 240
aggagggttc ttcaagtaag aacaacacct aagcatcggg ccaccacct atcatattat 300
taaagtagca aaccgaatc aaaccaacat gatgaaagtg actagatgaa attcccggtg 360
accctcaaga acgttttcct taccataaga gaccgttttg gcctgtcctt tgcctcaaaa 420
ggattggggc accttgctac acttttggtt cagt 454

<210> 942
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-F1

<400> 942

gggtcgacgg gggcggtaaa cgatagcgct agttgggagg caaccaatt ttctttatgt 60
tttttttggt tttgctcctg tttagtaata aatcttgcac ctaccttctg tttatatgtg 120
tttttatctt ttaattactg tttgtgcaa gtagaacct taggataagc tacgatgata 180
gttgatttga ttctgctaaa aaacagaaac tttgcacgca cgaatataat ttttttaa 240
cacaggaacg tgattttgca ttgattcttt ttgctgctgt tcaataaaca aattgtccag 300
gacctcctat ttttctagga ttttagagt ttcaaagtt tgcgttagtt acagattgct 360
acagactggt ctgtttttga cagattctgt tttcgtgtg ttgtttgctt atttcaatgc 420
attt 424

<210> 943
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-F2

<400> 943

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 ggaaagcggc agcgatgcct cttccattaa ccgcgtgctc tccagctccg gcatagaccc 120
 ctacatcaga aacctcatgg tgctcggact cggcttccgg cgctcccggg ccaacatcaa 180
 gcaggcgcctc aagcggcacg acgatgacag cgaatggtgg atgtgccttg ccattccatt 240
 gaaggacatt atgccggtgc ctcccccatc gatggaacca ccgccaccgg tggagaagaa 300
 gaatatggat acgaacatga atgcgctgac ggatatcgcc gctggggccat gcattacatg 360
 tgttaatgat gaacttcctg accctgctta tggcgatgat ggaattt 407

<210> 944
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-F6

<400> 944

aattccccggg tcgacgggga tcccaatgat atgcctttgt cttctttgat tgagaataat 60
 aatgaatcta tggacgtgaa ttttgttggt aggaatagtt ttggaaacaa tgcttataga 120
 ggaaacttta atgctagacc gttccctagt aattcctcta ataattatgg aaattcctac 180
 aataattcctt atggtaattt taataagatg ccctctgatt ttgataatag tgtgaaacaa 240
 tttatgattt ctcaaaagaa ttttaatgcc ttgcttgaag aaaaattgct caaagttgat 300
 gatttggtta ggaacgttga tagaatttcg cttgattttg attatcttaa acttagaact 360
 tctcctccta agcatgatat caatgagtct ctcaaagcaa tgagaatttc cattgatgag 420
 tgcataaaaa gaaccgctag attgcgtgct aa 452

<210> 945
 <211> 433
 <212> DNA

<400> 947

cgggccggca ctncggggtc gaccggagaa ttagggccaa gcagatgatg tctggtgatg 60
aacttatgat gtctgcggaa ggtcggagct ttgtggatgg tggcatgaag gagatagaag 120
ctggagggtgg aggatacaga agaggggcaa atgatgactt catggtttat ggaacaggaca 180
actcaatgga caggaggagc tccttggacc cccttgccga ggcgcatcac aagagaccca 240
ctcctctaga ggaaaagaag aatgtgcaca gtatgggcca tgagtccttc atgatacctg 300
ttacctcaa ctacaggat aatcttggag cagccggccg tactgccatt gacatagatg 360
ccgagcttgg ctcaagtgtt cagaaaacat cagatgctaa cgctggagct gaacttttct 420
atgagccaga tgagttgatt ccagagcgtg gatttgaaaa tgtttcattt ggatatgacc 480
catcaatgga ctatgac 497

<210> 948

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-021-Q1-E1-G5

<400> 948

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cagtatcgtg cattgtgctt tcgcaccttg ggatttggtg caaacttcgc aggtgcatcc 120
atctcccggtg ataatcatag attctatcac agatttacct cgttatatct tcctcatgac 180
agccatcata cctacctagt atggcatttc catagtcatt ccgagatata ttgccatgca 240
actttccact gttccgtctg ctatcatgac acgcatcatt attgtcttat tgccttgcac 300
gatcatgtca ttgagatcat atttgtggca aagccaccat gcataatatt tcgtacatgt 360
cactcatgat tcattgccca tctcgggata ccgtcagaag cattcatata gaatcatatc 420
gtgttcaagt tttgggttgt aattc 445

<210> 949

<211> 409

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-021-Q1-E1-G6

<400> 949

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cgacctcttg gtcgctggtg ctggcttaag ttttgagggt attgtcatgt catatttggc 120
tcgactcacc agtcgaagtg atgactggct caccaagtga aatgatgaat gtaaactctat 180
cctgcactgc aagtttaact gtctatcctg cactgcatct ttaactggcc agttgtatga 240
ttcctggctt gtcttgtgtg agagcactct atatatgatg agggttctat gttcgggtgga 300
atctacttgt gatgagaatc taagttctgt gatggcatgt gagatgtaag agcactcata 360
taattatgtg gatcctatat ataaccgggt gatttatcta ttgtgttct 409

<210> 950

<211> 420

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-021-Q1-E1-G8

<400> 950

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accatagaga agttggaata.cagtaagttt aacaccaata taaataaata atgagttcaa 120
tacagtacct tgaagtgggtg ttttgttttc tttcgctaac ggagctcacg agattttctg 180
ttgagttttg tgttgtgaag ttttcaagtt ttgggtaaag atttgatgga ttatagaaca 240
aggagtggca agatcctaag cttgaggatg cccatggcac cccaagataa tctaaggaca 300
ccaaaaatcc aaagcttggg gatgccccgg aaggcatccc ctctttcgtc ttcgtccatc 360
ggtaacttta tttggagcta tatttttatt caccacatgg tatgtgtttt gcttggagag 420

<210> 951

<211> 473

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-021-Q1-E1-G9

<400> 951

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aatataactt tttagatata agaaaacata actcattacg ttgtcttcct tgtccaacat 120
caacctttta gcacgtcata ttttaatgag tgctcacaat taaaaaagggt ttccaagata 180
gtatatattat atgtgaaaac ctctctttct ttcttacttc ctactaattg caacaatgac 240
caaaactatg ttagtcaact ctcaacaact tttattcatc atactgttta tatgtgaagt 300
cattactctc cataagatca atatgatctt tttatttctt tttattctct ctttaataacc 360
ctcaagatca tagcaagata gcaaagccct caactcaaaa ctactcttta ttatataact 420
cacggactcg attacataga tagagataaa acaaaactca aagctagatc atactaaaac 480
tt 482

<210> 954
<211> 428
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-H5
<400> 954

attcgcgggt cgacggggagg tccaaagaat ttgcagacc aaaactttat tcaagaacct 60
gtatagagtt ttcccctcag acccccggca tgtaaaatgg cattggtgat tatggtaccc 120
tctgtaagat tacgtgttga tgtatcaatc aaattggatt gaatcacaatt ttttattcgg 180
tatcgccttt attcatagac tatgttctgt cttttcagtt gtctcatgca aacacctcgg 240
cacaattgc taggggctct atatggcaac ataggtattg ccaaacaaaa gtccgaacaa 300
cttttcagca caattcggca tcccagctt ggcactatat gcaccacctc tgaatcatgt 360
ctttggtcaa tagttgggtt gcccggtcc tgtgtttgct accttacgtt ccgtctgtcg 420
gctatggt 428

<210> 955
<211> 371
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-H6
<400> 955

cctgcctgtc tacttagttt aacagctgta gctttgttgc cagataaaat ggtgaacttt 60
gcgtaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
accaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaggggccc cccaaaagga tcaaagctaa 180
cttacccttg aaggcaacgt aaaaccctt caaaagggtc accaaaattc aattaacggg 240
ccgtcgttta aaaacgtctt aacgggaaaa accctggggt aaccaaatta aaccgccttg 300
aaaaaaatcc ccttttcgca agcaggggta aaagcaaaaa ggcccaaacc gttggccctt 360
ccaaaaattt g 371

<210> 956
<211> 448
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-021-Q1-E1-H7
<400> 956

gtaccgagtc tagaattccc gggtcgacgg ggacgacgac gtggatgtgg acgagtcgga 60
tagaaagctc ttagatgatg aaaagaaacc cgatatcacg aaacgaccac acactcctat 120
tggagatgag gtggaatgca agaagccaaa gatagcagaa ggctcaaggt gccaaggaga 180
agaacctgag gctggaggga taaagaattc ctctgggtc tgatgacagg ggaatgcagt 240
aaacaccaga agcatcaaaa ctatgatctg gaacagtatc ctgaataaac tattttcttg 300
attatgaatg aattctgaag catggggcta taagtgaatt atgtaacatg gatttgtaac 360
tatggtggat gttaagttaa cgttctatca gtgcatcgtg aatgcgtgct gaatatgctt 420
ctgttatggg ttcgtaactt cgagactg 448

<210> 957
<211> 410
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-021-Q1-E1-H8
<400> 957

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caatggatgg caagattcaa gcatgtgatc tcttcgtgat gctccatgtc ggtgtcaaaa 120
 ccggcggatc tcgggtaggg ggtcccgaac tgtgctgcta ggcggtatgt aacaggagac 180
 aagggaacacg atgttttacc cagggttcggg ccctcttgat ggaggtaaaa ccctacatcc 240
 tgcttgattg atattgatga tgtggatgtt acaagagttg atctaccacg agatcggaga 300
 ggctaaaccc tagaagctag cctatgggtat gattgtatgt tgcctatgg acgaaaaccc 360
 tccggtttat atagacaccg gaggggagaa aaatnntca tntttttaag 410

<210> 958
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-A1

<400> 958

taccggtcta gaattcacgg gccgacgggg accgaagcca acgaccgagc gaaccctaga 60
 ctccgagcgc acgaggagag agagatggag atctccatgt cgcggtcatg gcgatgcgcg 120
 cgctgtacaa cgagatccgc gcgaggaatg tgccgcatgt gccggcgtag ctcaaaccgc 180
 gcctcacctg ggagaacgtg atagaagagc accgaccatg cgggtggaccg ctacatcgag 240
 aagtacatcg agaccagctc ggttgaccgc ctcttcacg tctgcttcgg cggcatgggc 300
 ttgcctacc tcgtgggcct gcccaggag cgccgccacc tcgagcacct cgagaagcac 360
 ggcgccact agatccggat tcgcctcgcg caggagagct tatctacggt tgat 414

<210> 959
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-A10

<400> 959

ttcgggggtc gacgggggagc tgaaactgct ggtcttttac ttcgagaatt ggaactgcaa 60
 cctccttctg aaaaatggca tagacgcaac atgtttggag gaccctggtc agaaccagat 120
 gatctcggtc gcattggata atatgccaca tctgaaaata ggtggtcata tcaaccctca 180
 cttgtctgac atggaagagg agggtaaaac taactttggg attcaaagtc tttggccaag 240

aaagcgccgg ttgtctgaaa gagatgcagc atttggctctg aaaacatctg taggtcatgg 300
agcttatctt ggcgtgatgg ggtctcgacg agatgtcatc acagccgtgt ggaaaacaag 360
acttgatggg gaatgggtata agtgcatacg atgtctgcgg caaacttggt catttgcaca 420
gcctgggtgcc cca 433

<210> 960
<211> 440
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-022-Q1-E1-A12
<400> 960

gtacgggtcca gaattcccgg gtcgacgcca ccacggaagg ccgggtggcc gactggatct 60
atgccatctc catgggcctc gccacgggca tctttgtcta cgtctccatc aaccacctcc 120
tcgccaaggg gtacatgcta cagaggcccg tcgccgccga cagcccgtc ggccggtggc 180
tctccgtcgt gcttggcgctc ggtgtcatcg cagtcgtcat gatatggaac gcctgacct 240
gaattcgtga ttcatagaga ctagaagcat ttagctatgg atgtaagcct attgtgctgc 300
tataagtttc tgctagtgtg acaccagatt tgcagtacca gctgatcaaa tgaagcagct 360
aatgacagat aaacataagc actaaatccc tggttgtttc aatacgcat tagtgtgtgt 420
gtatatatat atatatcaac 440

<210> 961
<211> 277
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-022-Q1-E1-A2
<400> 961

gtcaagaatt cacgggccga cgggttgat agcatgcaac cactgacatc gcataagttt 60
ggcgaacgct ttaaaaatat atttaaatac gctgtagtgc aaaactgcc actgaaccag 120
atttgaaaat cagggtgtaa actcaaaata tgcattgaat gaaatatgtt ttgcataaca 180
gtgatttaga aacctcat gacatctcca gattttggtt gaaatttgta gataaattta 240
tcaaagtctg gtacttcata aagagctcca aaactaa 277

<210> 962
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-A6

<400> 962

attccccgggc cgacgggggat actatttttct tttgtttcag gtattgccgg aacaagttta 60
 ttcaattcag ttagtttaaat ggcctataat gtcttctaca caagcattcc tgttttaact 120
 actgttctgg acaaggattt atctgaaaag acagtgcac aaaaccaga aattttacta 180
 tactgccagg ctggaaggct tttgaatcca agtacttttg ctgggttggtt tggtcgatcg 240
 ttatatcatg caattgttgt tttcttaatc accattcatg cttatgccaa tgaaaaaagt 300
 gagatggagg agttgtcaat ggttgctctc tcatgaagta tttggttgca ggcttttgtc 360
 gtgacactgg agatgagttc tttcactttt ctgcagtttc tggcaatatg ggga 414

<210> 963
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-A8

<400> 963

gtaacgggtca ggaattcccc ggccgacggg acgaccaggg actgtgttca tgtggatttc 60
 agttgcttgt ttgacaaggg tttgcagctt gagaagcctg aggtggtgcc attcaggctt 120
 acacaaaaca tgatcgatgg gttgggcac gctgggtacg aaggcgtctt tctgaaggtc 180
 tgcgagatca ctctgtcggg cctcaggggc cacaaggagg cgctcatgac ggtcctcgag 240
 accttcatcc acgaccact agtggagtgg accaaagccc acaagtccag cggaggggag 300
 gtccgaaatc cgcaagcgca gagagccatc gccaacatca cggcgaggct ccagggcgtc 360
 gtggtggggc tcaacgccgc tccctccctg ccgctctccg ttgaaaggca tgcgcggcgg 420
 ctgat 425

<210> 964
 <211> 415
 <212> DNA

<400> 966

cgggctctag atggatggcg aggaaggatt tgaggaggcc gcctgccttc caggatttat 60
tagttgtctc tcattatgat gttccccttt ttgtgatcag aaacttgaca agttagttac 120
tgtgtgtaga agaacaacat caccgtggga tccttggaac gcctttggaa tccaattttt 180
aacggaaagg aactttaaaa tcgttaaacy agcaaaaaat taaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa aaaaaaaaaa aaaaagaaac aaaaaattaa aaaaaaaaaa aaaaaggggc 300
cgctcaaggg gttcaaactt tacttaccac ttaaaggcga cctcaaaact ctcca 355

<210> 967

<211> 458

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-022-Q1-E1-B2

<400> 967

cgctgcaggt gacggtcaag aattaccggg tcgacgggat acaggcgggg aaggtaccgg 60
tgccgatgcc gctactgaaa agaagaagca gaagaagtag aggatacgaa aacctaacta 120
actcggcatt ggacgactgg tgatcacaaa gatgacacct ggcaagtttg agccatttga 180
gccggaacaa cctcgcaagt gctatgggaa ccaagtagga tgcacacctac aggaatgcac 240
gagcatcaac gatgatgact taaggagtca agaacatttg aggcagttgc tcctgacgaa 300
gttgtagaag agattcaagt tccccgacag ggatgataac atagaacaac catgggatga 360
tccgaagatg aaaaagatta acaatcacgc catgggcatg ttcagcaatg atttggcctc 420
ctggaaagag aggggtanaca agctattgag gccgaaga 458

<210> 968

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-B6

<400> 968

gtcaggaatt cccgggtcga cgggggtgca cacactgggt aaggagtctc caccagagaa 60
gcaagccacc acagctgaat ccatcaacaa ctctgtcaga ccttcacctc aaatgcatcc 120

cggtgtaagt aatggtgaag gctccggtgc gagcacgcag ctgaaccgac acgaccaagc 180
 cgagtcatt ggagcgctgc tcgagcagat gcagcttgac gagcagatcg gtagtctagc 240
 aacatagacg aacaaccaac cgagcccggg ggctgggtgcg agaagaagtt accatttggt 300
 agctaaagaa gaattgcaag ttttttttg attttctggt cattgaggtg gtcagtcaac 360
 aagccaaaag gatggatgaa tagctgaagg cggtgattca gggattgggt ttcgttaaat 420
 ttttggg 427

<210> 969
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-B7
 <400> 969

ggtcaggaat tcccggctcg acgtagctcc ttgagaaaga tgccgaaact catgtataga 60
 tcaacactcc aatcatcaat gctccaagca tcataccgga gattgactag taggatcaca 120
 aaagtgatgc atctgtacat gaatttgact acatttcctg aaaaaatacc cagaagaggt 180
 tgagttaaca atatgtgagt ttgaaaatgt tgttcatatt ttactagtag tatttgggta 240
 gggtagatgc tagacaagca taagtggagg tgaattagat gtctgaataa aaattgtcga 300
 taacatgtag atgaactgca cagacatcaa aaatcttatt gctcccatca atatccggca 360
 gattagacta tagttattaa gctataaatt tgtattttct actccagctg ccatagaaaa 420
 cccaagttga atcaacattg caatt 445

<210> 970
 <211> 439
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-C11
 <400> 970

tacgggtccag aattcccggg tcgacggggg ccgccgacac cagcttctct tcctcctccc 60
 gcagcgctc ctcgaatcca agagatcaag tcgctgttgt tgtgccactc cccctccagc 120
 cgccgtcatg cagaacgagg tgggtgacat ggtggacctc tacgtcccca ggaagtgtc 180

ggccaccaac aggatcatca cggccaagga ccacgcctct gtccagatca acattggtca 240
 cgttgatgag aatggcctct atgatggccg cttcaccacc tttgctctct ctgggttcgt 300
 ccgtgctcag ggtgatgctg atggctccct ggacaggctg tggcagaaga ggaaggctga 360
 gatcaagcag ctctagatgt tgctagtagt tttacctgga acttgtgtcc ttcccatgtc 420
 tacctagctc ttggatgtc 439

<210> 971
 <211> 421
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-C12

<400> 971

taccggtcca gaattcccg gtcgacgggg atgatgatcc aggtctccaa gaagagcaag 60
 gaggagtttc tcagttaggc ctgacagcgg tagctgttgg ttgccgtgac ctggagtaca 120
 tagctgcta tgtatctgat atcaccaacg gcgctctcga atccatcggg accttctgca 180
 aaaatctcta cgacttccgg cttgtcctgc tcgacagaca aaagcaggta accgatctgc 240
 cgctcgacaa cgggtgttcga gctctgttaa ggagctgcac caagctccgg agatttgctc 300
 tctacctgag acctggaggg ctctcagaca caggcctcga ctacatcggg cattacagcg 360
 gcaacatcca gtacatgcta ctgggcaatg tcggcgattc ggaccacggg ttgatccgct 420
 t 421

<210> 972
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-C3

<400> 972

cggtcaggaa ttcacgggtc gacgggtttg atcttgttgt tgcaaataatg tagatctagc 60
 attcaggatt ttaacataga ttatcaacta accataatca tgataacatt tatgtctcaa 120
 attcactcat atcaatggca taattaacta gcgagcaata ataatgaatc tcagatgaca 180
 acattttttt caaataatc atgatacaat atgatataat ggtatctcgc tagccctttc 240

tgataccgca aaacatacat acatagcacc cgtgaagatc aaggactgac tagacattat 300
aattcatggt atatgagatc cagtcacact cataactcaat atcaattaat aacaatgcat 360
acagatgata gtagtgctct ctaatcgggtg ctttttataa gagcatgatg acttagcaat 420
acacgtaaat agatacgccc ttcgcaga 448

<210> 973
<211> 414
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-022-Q1-E1-C4
<400> 973

ggctcagaat taccgggtcg acggggttga tagtgtagt gcagatatgt agatctagca 60
ttcaggattt taacatggat tatcaactaa ccatattcaa aataccattt aggtctcaca 120
ttcactcata tcaatggcat aattaactag cgagcaataa taatgaatct cagatgacaa 180
catttttttc aaaagaatca tgatacagta tgatataatg gtatctcgct agccctttct 240
gagaccgcaa aacataaata catagcaccg gtgaagatca aggactgact agacattata 300
attcatggta taagagatcc agtcacactc atactcaata tcaattaata gcagtgcata 360
caaatgatag tagtgctctc taaccgggtgc tttttataag agcatgatga ctta 414

<210> 974
<211> 441
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-022-Q1-E1-C5
<400> 974

ggtcaggaat tcccgggtcg acgggggagga ggagcatgat tggatgatggt gtggagtatt 60
gctaccaccg tcatgttttag gtgtcctctc tactcttttg gtgtcccgat gccaaaggag 120
gagagagtgt acggatttgc ggtgtgttgt gagttgagtg tgtttctctt tttgcagttg 180
ctttcctcgc tcgaactcgt ttgctttggt ttgtgtttga gaccatatgg ggtgagacat 240
atgagctaag ctatccattt ctatctatgt caagtacttt atgttaagta atcgtttgtg 300
agatatatct tgtgtatgct ctcatcata tgctcacata gtttctcttg catgctttca 360

tcttactatc tatgcaagta cggtttgggc tataaaatat aggggggggtg gatcctatat 420
gtgtgcattt tgcattccaa a 441

<210> 975
<211> 445
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-C6

<400> 975

ggtaacgggc aggaattccc gggcgcacgg gtctgatggt atcctaagta tgcattcaaga 60
aatgaaagca agtcacatcc atccgtggag tcaacaatct ggatgatgag cggcaaggga 120
aatgggtctt tgggacaagc tttattgaca tcggtaaagt ctatacatag cctccatttc 180
gcgtttgcct tgcgcacgac tacacgggtg gccaaaccacg tatgatggag cactcctctg 240
acaaagcctg ctgcttccaa tttcttgatt tcttctgcga tgaattcttg gtgctccact 300
gcctgcttcc aaactttctg cttgacgggc cgcgcatgag gacagatggc aacatgggtgc 360
tcgattactt tcatgagaac accgggggatg tcagacagtt gccacgcaaa tacatcgacg 420
atcgcccgca tgaaagcaac gagcg 445

<210> 976
<211> 457
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-022-Q1-E1-C7

<400> 976

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gcttctcagc ctttttcatt tgtagatgac tgtactcaga catgttaagc ttccgcttgt 120
gctttgactt gtatgctctg aatgttgggt tgtgagaccc ttgtttgtaa tatctcgctc 180
ctcgagcct aatgaataaa tacttgagtt gtagagtcac gttgtgatgc catgttgtat 240
ttgcacatat cgagcatatt gtgtgtatgt tattgaaatg cttgggtatgt gtgggatctg 300
actatctagt tgtttatcct tagtagcctc tcttaccggg aaatgtctcc taatgcttcc 360

actgagccat ggtagcttgc tactgctccg gaacacttaa gctggccggc atgtgtcctt 420
cttcgttcat gtgtatgtcn ctttggggaa atgtcac 457

<210> 977
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-C8

<400> 977

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ttagtgtccg cattcctgaa tgatttataa cttctccttg tgccacgtgg tgtccttcca 120
atgccgcata caacctgtag tccggccacg gatgatcttc ccgcttcacg gagcgggtcc 180
ttggctccgt cggatatgga ttcccttccg accgcctcga cccctcatga cgctaatagac 240
gcctatgtgg gatcctaaga tgggaccacg cgggaggatg aggctccgga ggtgccgcaa 300
ggcaacctcc cagacttcgc accggactcc gcaccggaat ccgcagtggg tccggagtcc 360
ggcaagcggc cccttcgtaa gaagggaag actgtgacac cggcggccac cgtccaaccg 420
gtggcgccgg ataac 435

<210> 978
<211> 446
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-C9

<400> 978

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attcaccttc aaattcgtcc ggagcgttga gttacggacg aaacaatctg acgttgcagc 120
agaatccgag tcaaactaca agcccaaagg tgttgcacg cctccacttg ggcccatgag 180
acttgtagc cctaggggta gttttaggct gccttgggtc ttctctccac ctcttggcc 240
accacccctt gctcctatat aagtagatcc atctagtagc ttttcttggg gatttgttta 300
gttaaaagtt agccattgca acttcgtgta cttcgtttgt gtccaacgac cagaccaaga 360
ccgcttccgg atccccacca ttatcaatac ttcatatata tttgcaatat tcagattgct 420

ttatcatatt cttgctcgtt cttcga

446

<210> 979

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-D1

<400> 979

ccggtcagga attaccgggt cgacgggata tattaggcta ctgacttcga atgtaatggt 60

ttatagaatt caatagttaa aatcattgtt gaattccaag atgtatacga ggtctatagt 120

acttcacaat atgctcaaac tcacataatc ccagtcaaat gaaaatctaa atgcgtttca 180

tagttattac tttataggat gcaacaaaac caactataac tctacatgat ccattataaa 240

agcaatattt tgaacacatc acaatgtgtg aatgaaatgt ggagagagag cttgcaaaga 300

tggagcagat agggcgagaa agattgcatg tatgcgggag agagagtagg agacaaacct 360

aataagagag agaggggggg agaagttagg tctatgagaa agatggagac atgtaatata 420

cgtgagatgc atgtgcattc ggattttgta 450

<210> 980

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-D10

<400> 980

attcccgggt cgacgggatc ttcggacca tcaacgaatc atcaagatgt tcgagggagt 60

cattgcaaca tcttacaatg aaggtgacaa gttcttcatt gaccccatga agctgctgcc 120

cctctcacgc ttctgccac agccaaagg ctcgactcca agaggtggtg gtcgcagtgg 180

aagaggtggt ggctgtggtg gatttggtgg ccgtggtgga ttccgtggaa gaggtgcacc 240

aaggggtcgc ggacctccca ggggtggagg gcgtggtttc agaggacgag gcagattcta 300

ggatgtagtt ttaagtttgc tctttgttga aacgtgatgc tctacattat ctgttcagct 360

ggaaacatta tgctaagtca gctgtgagcg cac 393

<210> 981

<211> 406
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-D2

<400> 981

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 ggaactggaa aagccgtgtc aacgggaacg ctggagagcc caaggacggc ggagaagccg 120
 tcggcaggcg acatcgtgtc gatggtgatg aggagaaggc gtgcatgcc caggagcgag 180
 cagccctctg aagctgggcg cgtgaaatcc tctggcggga tttttggata cgtgcgagaa 240
 tccagtggta aacaagagaa agagggcctg gcatcacctg gtgaggggga gaaaacacca 300
 cagaccaagg aaggtgtggt ggctgctttg gggggcgggtg aggaaactgg gcttactgca 360
 gatgcgccgg tttctgcaga gaaggcaata gcgggtgatg ccgctg 406

<210> 982
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-022-Q1-E1-D4

<400> 982

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 gctggtgtca ctgatcgatg atggatgttc gctgctagtt tagctccatg gtagtccctc 120
 cctctctttc aggttgetgc tgctgatggc gatgatagaa atggtagctc tagtcccatc 180
 tagtcgttgt cctggatccg agtgggtgaag ttgctagtct ggtttccttc ctgtagggtc 240
 ctgtgctcgg accaccctct gttccttcgt ttttagcatg ttttaattca gtctctgtcg 300
 gatgtacctg gtgtcgtgcc tgtggttgtt ttaagaatcc taccagatc tcaatatata 360
 tgggtgttgaa agcaaaaaan annaannaaa aaaaaaaaaa aaaagcggcc gctct 415

<210> 983
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-022-Q1-E1-D5

<400> 983

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cagtggagag aaacagcagg atgtgtcaa tgggaagcca aagtcgcctg tagcgaatgg 120
tgtaaacggg gatgcgaagg ttccggcaga gaaagccgt gccaccgtg ctctccagc 180
cgttacctac gcggcgaagg tggcccaaac agcagcggcc gagaagaagc ctgcggcgac 240
cgagaagaag cctgtcgttg ccaacgggtg tgtcaagacc ggtgtagctg cttgatcgca 300
taccgatcc tcccagctag ccatgaagaa caaacggacg gtgctggcga accaggcgag 360
acatgcgggg tccaaggta ctgatcacca aagtggtgctg ctggaaagcg ggtagcatag 420
ttaagtttcn ctactctct cttttttctt c 451

<210> 984

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-D6

<400> 984

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agaaccgttc ggtcaaggac gcactgcagc ctgacagatg gatcctggac ttgaggcgag 180
gtgaccccca tgccattgca ctgcagggtg tgcagcttgc gagggaaatc aggcaggcag 240
ccctcgccat catcccagga accgaagatt ctattacctg gaagctcagc gcctcgggat 300
gctacacaac aagttcagcg tacaatgcc aattcagcaa tagacagatt acctccttca 360
aatccatcat ctggaaagtc tgggcgcgg gcaagatcaa gatgttcctt tggttgctgc 420
accttgaca 429

<210> 985

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-D7

<400> 985

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gaagcagaac ttaccttaaa tgctcctgct gatgttgacg cagatctact gaaggatgat 120
gatgatgctc agctactaca gcaagcactc gctatgtcaa tggatgaggg tgcttcagga 180
gctgcagccg tggctgatgc tgctatggca gaagctgctg cagatgacca ggatttggca 240
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gtgtttgaag acagatcatt tgtgacatcc atccttaatt cgctccctgg tgttgacccc 360
aatgacccat ctgtgaaaga tctactggca tctttgcatg gccaaggaga gcaggaggag 420
aagaaagata cggaggacaa gccagacaa 449

<210> 986

<211> 446

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-022-Q1-E1-D8

<400> 986

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agggcgacga cgagtatgcg ctgctcacta ggataactga cacatcagca gctgaagcaa 120
gggcaggaaa ggatatacaa ggtataccat gggagagggtt acaaatcacc aggcaggatt 180
acagaaaagc taggttgga cagtacaaga actatgagaa cttccctcag tccggagagc 240
tcatggataa gttgtgcaag caagtggaga gcagcagcaa gtactatgaa tttcaatata 300
acactcggat agtgaacccc tcaattctcc attttcagct tcggaatttg ttatgggcaa 360
cttcaaagca tgatgtttat ttcattgtga attccacagt anggcactgg tcgtcattgt 420
ctcacanaat gacagatggt cttgat 446

<210> 987

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-E10

<400> 987

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 gggacctggc ggatgcgcta ggaccttcca tcaaactgct gctcaagaat tccaacttcc 120
 actcgagct ccttggggcg tgttcccagt ctgatgacga acagctgagg gagactgcat 180
 cctgggtcca ggggtgtgac tcacgtgtgc tggtttcatg agggaaagct tctccagcaa 240
 agctgccagc gttgttgatg gttctctggg caaactatct ctcttgccag atgaaatatt 300
 tttgagaaat atgctgcata tatgtcctga tatcatgttg caaaagtgga acaagggtgc 360
 atgagatcat ttacggctgt caagttcgta gtagtggcag cggcttgcca ttgtctaaag 420
 tgggttgggt 430

<210> 988
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-E12
 <400> 988

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 tatgaaattg tttgctagca agagtgttc tattatcct aatgatattc ctttgttcac 120
 tttgattgat aataataatg aatctatgga tgtgaatttt gttggtatga acaattttgg 180
 taataacgag tatagaggct attttaatcc taggccgttt cctagtaatt cctctaataa 240
 ttatggtaat tctacaaca aatcttatgt aaattataac aagatgcccc ctgattttca 300
 aaatagtgtt aaagaattta tgagttcgca aaagaatttc aatgctttgg ttgtagaaaa 360
 ttgcttaaga ttgatgattt ggctaagaac gtggatagaa tttctcttga cgttg 415

<210> 989
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-E2
 <400> 989

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 ccggcgccgt gacgagtgga ggaggcacc catggtgggg aaccagctgc gccacgccac 120

tccggggcta ggcacgcga tcgtgcctt tggatctac cttgtcggcg aggccgccta 180
 caaccgcctc taccgcccgc cggcgacaa ccaccactag atctcccca gaggtgaagt 240
 agatggagca aaccaatgtt gatcttttcc ggtttgatct cataaggtct gcatgaccac 300
 cttgtaattc gcgatcagga gatgtgctgt tggccaact agtggtcctg gaacgcgtgt 360
 cctttaaatc tgatactccc tccgtccgca aatacttgtc ggacaaatgg atgtatctag 420
 acatatttta gtctagatac at 442

<210> 990
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-022-Q1-E1-E3
 <400> 990

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 ttgtcgaat tctgaccgtg aaggaagtgg aagtagagga gggagacgac gtggccaatg 120
 gcgtgaaggc gatatggtgt tcgatccgtg acgtagagga agcaggggaa gaagaccgcg 180
 acggggcgct ggacttggcg atccggctcg tggaggtcgc tcaaaggaa gaagaaggcc 240
 accacgacat ggacgacacc gggctcgagc tcggcttggc tcgaccggcc atggcgacgg 300
 cgacggcagg gaggcgcgtt agggaggctc ccgcccaact aactgggggg atcggtcgag 360
 gaggtgacg ggggtgcagga cgacacgtcg aagacgagct tgaggccctc cggccgcgag 420
 aacgacgacg ggcac 436

<210> 991
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-E6
 <400> 991

ggtaccggtc aggaattccc gggctcgacg gtgggtcaagg agtcaaactg ttgaacatat 60
 tgggaaaata ttgtgaagct ttttcttcga tgggtggagg gaaaaataaa gtgtcaacag 120

ttgcctattc gagtgcaaga tggggtgata gcaactggga agcggcccat tgttttcttt 240
ctatcttttc tttggttttg ttagaatagt catcgatctg cgccttatgt atgttatttt 300
tgctcgcatc aggctggact gggatcgctg gagagggcgt acggtaaagg ttgcccccat 360
ccaggcagag cccaaggatc gatatgtgta tattatatat aacaatgcta cactgtaaca 420

<210> 994
<211> 473
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-E9

<400> 994

cgccggcagg taccggacca gaattcccgg gtcgacggga cggaggcatg aagcagttga 60
gtagggtgtgc gtggatacac actattcatc gcatttgtca tcgagcgatt gcaccactat 120
cttcagaagc tcatcaccct gaggaaatca gtcaacacct cccagagagg agcttgaaat 180
tttccaaatg gagttcaaac gtgaatttga gaaaatgatt ccttggctaa gttccaaaaa 240
tgtcattcta tgaagttcgg ctattcagcc atggactagt caatgggtgga gttgcaattt 300
tgtttctttt gtacatacat gaattgaatg taatcaacgg aaagaaacat atgttgattc 360
tccaagttag agttcatttt tattttctac aagtagcaaa acttcctgtg tagattaata 420
catgttctgt gcgatcttgt gttacaaatc ttgtagtact gtttttacag gga 473

<210> 995
<211> 432
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-022-Q1-E1-F1

<400> 995

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tgcacgagca cgagctcttg ctgatccgcc gcccaggcc gtacggctgc gacgggtgcg 120
aagagatggg cacctcctgg tcctacaact gcgcggagtg tgacttcgat ctgcacacca 180
agtgcgcgct ggggtgaggag aagaaggag agggagtgaa ggggcaggag gatgctgctg 240

ccccagctgg gtacgtgtgc gagggagacg tctgcaggaa ggcctaggta gcgttgtgtt 300
 gtgtgtgttc ctttccagct gaagcgtgtc tgaatcatgt gctgtgtggt gtgatgataa 360
 ataaatcttg catccgatgg tttggcttgc gaaaaaaaaa nnnnnnnnaa .aaaaaaaaa 420
 agcggccgct ct 432

<210> 996
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-F10
 <400> 996

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 aagtttgaat gtgatcacgg tatttttttg gttgctaata atacatcgac acgttagtac 120
 aggtgctttg gatggattga agatcatggt tagctaggct gacatgtgaa tggcttctca 180
 agcatattgt tcaaccggat aaactccttc tcgtgtcctt cttcctttcc gcaaataaat 240
 ttcccctttt tgggatgaat gatctcaaag ctacgggggc aaagtataca cacactcctg 300
 cgaggtttct tttctgttaa aagaaaaaga gataagttag tattcatgtt atgaaatcac 360
 ccacatgcag tattcaaata actgtacaag gatatatagc cgctccaaaa gaatgtacac 420
 acatac 426

<210> 997
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-F11
 <400> 997

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 tctacatcaa taacctcaac gagaagatca aactcgaagc acttaagaag tccctcaatg 120
 ccgtttttct ccagtttggg aaaatcattg aggtgcttgc tttcaagact ttgaggcata 180
 aagggcaggc atgggttgtg ttcgaagatg ttgcatcagc aactgaggct ttgaagagga 240
 tgcaagattt tcccttctat gacaaacca tgaaaattca atatgccaa accaagtcag 300

atgttgtagc aaaagctgat ggcactttcg tacctcgaga aaaaaggaag aggaatgatg 360
 agaaacctga gaagaagcag aagcgtgagc agcaccatga tgtaaccag gctggcgtgg 420
 gcatgcatgc ct 432

<210> 998
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-F12
 <400> 998

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 ggcttgacc tggacagctt cccgctcgac cactagtttc cagaggacta cgggctcgag 120
 gaagaggatg agttggacat cgacggggag cctttgttcg aggacgaggt cgccaaccaa 180
 gccgtcggtg tgtagccgaa ggcgaagagc aggcggacga aggcatacat gatggccgac 240
 gacaagctcc tttgtgagtg ttggaggagc atcgggcaag accccaagac tggcggcgaa 300
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 ccatcgtagc aaatccaagc acgcacgggg tgggtgtcca ttttg 405

<210> 999
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-F2
 <400> 999

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 attgctagtc tctcttgctt cacttatatt attttgagag tcttttagaa cagcatggta 120
 tttgctatgg ttataaaatt ggtcctataa tggtaggcat ccaagtttgg tataataaaa 180
 actatcatag gaagtgaatt ggatgctatg atcaatttga tgcttgataa ttgttttgag 240
 atagggaggt agtgatacta aagtaatgct agttgggtga ttatgaattt aaagaatgct 300
 tgtgttaaag ttagcaagtc acgtagcatg cacgtatggt taaagttgtg taacaaattt 360
 gaaacatgaa gtgtacctgg cttgtgcatc ct 392

<210> 1000
 <211> 444
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-022-Q1-E1-F3

 <400> 1000

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 atctcaggaa gcccagctac gagagggcag acccgaacta cgtgatgatg tcgacgaaca 120
 aggagcacct ggcgccggcc gccctgcgtg agttcgggca gcggcccatg ttccaggcgg 180
 acgtggactc gggcaacttc gaccacctgc ccacggagct caggcccatg agcaagatca 240
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 agatttcagt ttcaggccgg tttcagggtc agttggcgag agcttgctag ttcttttgcg 360
 cagctattcc acttatatag acatgtaata ngaggttgta gacagtcaag ttgtantgat 420
 ggttgagccg agcgtgctga agta 444

<210> 1001
 <211> 446
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-022-Q1-E1-F5

 <400> 1001

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 ctggagcagg aagagcagag attgaagaag cagcagggac gttggatgga aatccaacat 180
 tcattgcgtg tgcgtcaacc tttttttagg aaagcctcaa atctgtggaa aacaacatac 240
 aacccatctg ccattatttc taaaaattta cagcccattt gctaattctt aaggtttttt 300
 tggagcccat attctttttg ttagcattac agcccatatt gaggccactg ttaaaaaatt 360
 atacgaaatt ttgaataatt tgggtgcagtc cgaactattt ttaatcgca gatttcgagt 420
 cacattcaga catgatttta aaaata 446

<210> 1002
 <211> 407
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-F6

<400> 1002

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 gaatatctag tgcagccgct tggccgtgct gaagatgaag agcattccag tgactttgag 120
 ccggaagaaa atggtgatgg tgctgaggat gaggagattg aggatgatga tgctgaggat 180
 ggtgaggatt ctgtcaagcc gcaatcctca tcgaagagga agaggtctgg tggggaggat 240
 gaagatgatg atgacgggta tgatgatggg gatgatgatg agaagcctcc atcaaagcga 300
 tagtcaatth gttcttgctg atctggatc tttctgctc gggccaagaa ggaaaataat 360
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<210> 1003
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-F8

<400> 1003

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 aagtttggaac acacaccctt aacaaaccgg agcaactcgc tagtgggttc gtggttccga 120
 gagggaacaa tgcattgttc atgacgaacg ggagatagct tcctcttacg gccttcaaatt 180
 tttttcctcc gtttaacgtg cactaatgca actgtcatgt gaaatttttg aaaatttttag 240
 gggatcatctg accatttaaa tacatttaag tgattttcta accatttaatt gaccgtaatt 300
 caaatttgaa ctacatctac atgcaacacc taaccataac ggttttgaaa atcatagttt 360
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 ttggtctcag gccatgggca catgc 445

<210> 1004
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-F9

<400> 1004

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tggttggtact tacactggaa gtctgttggtc tacagagagc actttcactt ctgagggtga 180
acgttgcaact atctgcggtc gctatggcac ccttgaagcc atcgaacctt atgcactctg 240
tgaagactgt atgtcgcatc aagccttgct tttattgcag cgtctggaag gctgcgctga 300
actgggcacg ctttcaagaa ttaccaattg ccaatagaca atttcaacca tgggtccagca 360
aaaatagttt tcaaattgtca gcctagttat tttttagaga atattgctgc taacctgttc 420
ctttt 425

<210> 1005

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-G1

<400> 1005

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cccgccggcg gggcctcttc tagccacca ccaggcagga gccaccagc agccaggagc 180
agcaatgagg atggctgccg ccaggctcgt cagtcaggta cacaagacaa gaatgaacac 240
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gaattgtaga tctttcaaca acaacaactt gattagattg gattagatta gattacagca 360
actcagatgc tctcttgtct tccatgtctc tttcttctt aaaatccagt gcctggctga 420
tgctccatgg aatgtactct ctctgtctc cctcg 455

<210> 1006

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-G10

<400> 1006

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cgtctcctct cgcgccagggc cgggcgaaag ggaagcaaga tgtacaccgc caggaagaag 120
atccagaagg acaagggcgt cgagccctcc gagttcgagg acaccgtcgc gcaggctttc 180
tttgacctgg agaacggcaa ccaggagctc aagagcgacc tcaaggacct gcacatcaac 240
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cgtctgcgca agcccttcag gaagatccat gtcaggctcg tcaggagct cgagaagaag 360
tttagcggca aggatgttgt ctttggtgca acaagaagga tcgtgaggcc acccaagaag 420
ggttctgctg ttcaacgccc tcgca 445

<210> 1007

<211> 393

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-G11

<400> 1007

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agcccacccat cacgtcccgg gagatccaga cctccgtccg cctcgctctc cccggggagc 120
tcgccaagca cgccgtctcc gagggcacca aggccgtcac caagttcacc tcctcctaga 180
ctgacgacgc gccgcttggt gtgacagatg tggccgtctg ctgtatctgt agtcgctggt 240
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tgccaacgct ttgttggtg gttggatgta agaactgaac gtgttgcttt tgcaaaactga 360
tgaaatctat ctagaaaatg tcgcagttgt ggc 393

<210> 1008

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-G12

<400> 1008

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ttgagcttga ggtatgcata atgtggcacc gcattgaatc tagcgaatgc ggttcgtccg 120
 agcagcgtgt ggtaaccact gcggaacggg actatatcga agattaactc ttcgcttcgg 180
 aagttatccg gggatccgaa gaccacttcc agtgaattg agcatgtgca gtgggcctct 240
 acgcctggaa tgacgccttt aaaggctcgtc tttgtgggtt tgatccttga ggggtctata 300
 cccattttgc gcattgtgtc ctgataaagc aggttcaggc tgctgccacc gtccataagg 360
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 tga 423

<210> 1009
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-022-Q1-E1-G2
 <400> 1009

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 ttggtgcaac gtcggttggt caccaaagag gtggctctcg gtgacgtatg atgacatgtc 120
 atcgtcttgc tcgatgaaga gtgggttggt agaagtagtc ggcctatcca tcattctaag 180
 caaatgtga gtggtagaaa gagaagaact tataccaatg taccttgacc gatgttgaca 240
 atgaatcaag ttcactcaaa tgcgaccaat gaaatagcac tatcggtacc aattcttgtc 300
 gggtctcaca cctacacaat taaaagctta tgggtggagct tggttaggat ggtggcacia 360
 aatttgatgc aattgtaagt gagcttcaat aatgttgga aagattca 408

<210> 1010
 <211> 410
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-022-Q1-E1-G3
 <400> 1010

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 tctgaaatat ctcaatcttt gtacgttgag gattttgagg agtttgattg gattactaga 120

gctgtgttcc gtttcaactt cttcatagac atttttcttg ttacatcaag tagaacagag 360
gagaaaaaat aacttcatgt aaaagttttt actatgcctc tgcg 404

<210> 1013
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-G7

<400> 1013

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gccctcctgt gccttggttag agcatgagta acagtgtctc caattttcta atatggatgc 120
attgccacga gaagcgagaa cttgttaatt tgaatggttc catttttgcg ggaaatgcag 180
taccttgcaa tcactttggc gttattagta ggtgtcgtgg ttctaagtct gacagtagaa 240
tgaggggtag gtatgaggag gcaagatcct agctacgatg aggttggtgca cgcaagattt 300
atttacgagt tcaggccctt cacggaggaa gtaatagccc tacgtctcag tgccccggggc 360
ctcggtcgat tggattatg 379

<210> 1014
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-G9

<400> 1014

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ccatggcgta tgctgggtgca gtttttggag atgcatgctt gaaggggtctg aacggagttc 120
ctgacattgt tgaatgctcg tacgtgcaat caactgtgac cgagctgcca ttctttgctt 180
ccaaggtgag gcttgggaag aatggagtcg aggaagtgtc cgggttgggt cagctgacgc 240
agtttgagaa ggatgggttg gaagctctca agggcgagct caaatcttca attgagaagg 300
gtgtcgcgtt cgcaaagca agttagttag gtcattttgc agattatagc aaaccaggt 360
ctcgttgagg ggtctgttgg tttgggtccag tgctttttct gcccatcatg tgggcat 417

<210> 1015

<211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-H10

<400> 1015

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 aggaaatctc ggaaggagag gagtatgaca accccaaggc cagtgcgcc aagaagaaac 120
 aaataggcga ggggtgaggag aatggcgagg atgatgagga agaacaagag gagcaggacg 180
 gtggaggagg tgacgacgat gatgatgatg acgacgatga tgacaatgag gacgacgacg 240
 atgatgacga cgatgtcgct gctgaagacg atgaggatgg agtagaagag gaggatgacg 300
 accaggacaa cgacgatgat gaggaggacg atgacgagga ctgctccag cccccgaaga 360
 agaagaagaa gtgaagccct tcgacgcggc tg 392

<210> 1016
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-H11

<400> 1016

gtacggacca gaattcccgg gtcgacgtgc atgcgccagg ggaaccaggc gacttgccgt 60
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 agaatttcaa gccagatgta ccggagaagt acgacggcaa gtcgcatccg tcggagtcc 180
 ttagcatcta caccattgcy gtgcaagctg ccggggggcg agacgacaag atccttgcca 240
 actacttccc gctggtgctc aagcccaacg tcaaactctg gctcatgcac ttgccggaca 300
 actctatata ctcttgggca gatctatgcc atcagtttgt cagcgccttt acaggcggcc 360
 acaagcctca tggccaagaa agcgatcttc atctgctcgc ccagaaggaa ggagagcccc 420
 tgcgcaagta tattcagaga t 441

<210> 1017
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-022-Q1-E1-H12

<400> 1017

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cgacaaattc ttgccctgca taagcaaagg aaaagaacta ggccctgtcga tactggattt 120
taccatagtt ctagttctaa aaaggactgt caatttcttc ttaaaaataa ggctctggca 180
gggttctggg tagtggccca aaccgatacc aatagggatg agggatatat acttatgaat 240
ttcataattg attctattcc gcaattcata actacgaaag taagagggtcg gaaatctttt 300
tatccaaagg tcnctaaagg acattccttt ttttgctcct aagattgaag aagagattat 360
acgaaagact atcaagactt cctaattatc tgacactacc tacact 406

<210> 1018
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-022-Q1-E1-H6

<400> 1018

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gggtgtaggt atggatctgc tccagatggc caagcgagtt ggcccgcagt gcgaagctgc 120
cgaatacgaa gatctgtctg gggaggaaga tttccccttg gacatcatcg ttgtagatga 180
ttgaaggagc catcaaacct tttggggacg gcacagtgga actctcaatg gaagcaccaa 240
tgtcgatgtc aaaactggcg gatctcgggt aggggggtacc gaactatgcg tctaagggtca 300
atggtaacag gagacaaggg acacaatgtt tacccatgtt cgggccctct ctatggaggt 360
aataccctac ttctgtcttg attgatcttg atgaatatga atgttacaag atttga 416

<210> 1019
<211> 443
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-022-Q1-E1-H9

<400> 1019

gtaccggacc agaattcccc ggtcgacggg tctgtcatat tcagagccgt atgtatttcg 60
 caaatattct atgtccacaa tgctctgcac ggagctactc tagctaattg ctcccacttt 120
 caatatgtat ccagattgag acttagagtc atctggattg gtgtaaaagc ttgcatcggt 180
 gtaactttta tgacaggctc ttttatcacc tccataatcg agaaacgtct ccttagtcat 240
 cactaaggat attcttgacc catgtctagt gatctactta ttagattaaa attgtattcc 300
 tttgccaaac acagagcaag gtatacaata ggtctgggtc acagcatagc atactttata 360
 gaacctatga ctgaggcata nggaatgact ttccattctc tttctatttt ctgcaatgg 420
 cgggtcttga gtcttactca act 443

<210> 1020
 <211> 352
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-A1
 <400> 1020

ccggtctaga attccccgggc cgacggggat gagagcatct acatgcgcgg catccacggc 60
 atcctcgagc gtgatgggtg ctagtcgctc gatgtggacg cacacgaggt cttccaccac 120
 gatcgcgacc tacacagcaa gatggtacgc taccgcgcg aagtgcttgc cagtcttcga 180
 catcgtcctt atggccctgg aggcgcgtac ggggccgctg tttgcgaagc atattcagag 240
 caagatcgac aacatcacgt catccatttg ctggacgaat ctgaatccgt gagctactga 300
 gaggatgggtg tcaatcagag gtatgataat tcgatgcagc tcagtcatac ca 352

<210> 1021
 <211> 417
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-023-Q1-E1-A10
 <400> 1021

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 ctaccgccct taggcgcctg gtgaagactt cttcgctcac tctaccaatc attgggtggct 120
 ttatgccccg cagctacttc taagcctcgg aggaagggcc tggcatccat tgcactcatc 180

ccttgatgat gcggaatcac aggagcggct gcacctttaa ctgtgagcag ccaagcctca 240
accgcctact tgagcaaate aaggatgaag ctattgcctg gggtcgcgca ggagctacag 300
agtgtctccc ctgtacttgg gctgtccact agcttgggtg tgcgtcgtaa ccagcatttt 360
taggctttaa aatagttctt tctattcatt cgaccagtt ggtgtggcac ctcagtt 417

<210> 1022
<211> 385
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-023-Q1-E1-A2

<400> 1022

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tagtacttca caacatgctc aaactcacat aatcccagtc aaatgaggat ctaagtgcac 120
ttcatagtta ttactttgta ggatgcaaca naaacaacca tagctctaca tcagccatta 180
tagaagcatc attttgccat atcccaatgt gtgaatgaaa cgtgcagaga tagcttttga 240
agatggagta gatanggcgg gaaatattgt atgtatgtgg acgagagagt angagacana 300
cctaacgaga cagagagaga gatagataga gaaagagaga ggaagaagtt angtgtgtga 360
gaaagatgga gacatgtaat atacg 385

<210> 1023
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-A6

<400> 1023

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ggctcttggtg accggagcca ggttctcatg taatgatctc gaatgcagtt tgtcaatatc 120
acctgaaacg gaccgtctga catctcctaa gctgaagatg gcctttgggtc ttagcggcaa 180
cctgcaaagt ataatgcttt gaagaatcag gggatgaatt agatagcggg agtacatcat 240
accacctgat ggagaaaagg agcctagaga aaagcattct gcttgagctg gaacgcgatc 300

atcatctcaa aattcaagag gaagttagaa gtaagttatc ttcgttggag gtatgccacc 360
 aaaatgaaat ccagagaaca atctctgcat ttgctcgact tcagaaatat gcagaatcac 420
 gaaaagagat agatagaagg ct 442

<210> 1024
 <211> 308
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-A7
 <400> 1024

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 caagtttcac ttcacatcgt gatgttgttt tacctttttt ttcttgtcgt cgtcccgtg 120
 cctgctataa cgggcagcgc tccctgttgg cgccgccgcc ggcggggggtg gtgccctggc 180
 ggcggagggt gtatgtcctc tgccgccggg tgctcccctg cttgtacctg gatggttgg 240
 tactctttcc gtccaccatt gtcaccggct aacattgtga taatatcagt ctgggtaatg 300
 tttagaca 308

<210> 1025
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-A8
 <400> 1025

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 gtagatcatg aaaagaatac tttatgttat agttatattg ttgaattaat tcatgatgct 120
 actgaaaatt attatgaggg aggagtatat gctttagta attgcaataa tatcaagttt 180
 cctccctatg tgttgaaaat cttgaagtta tgcttgtttt accttcctat gctagttgat 240
 tcttgttccc ataagttgtt tgctcaataa atccctatgc ataggaagtg ggtaggctt 300
 aaatgtgtta gtcatttct tcatgattct ctatttatgt ttcaattcat atcttttatg 360
 tgagcatcat tgagatcatc atgcctagct aaaaatgcat taaagaaaag cgcttgtttg 420
 gagacaaccc aatatttacc cct 443

<210> 1026
 <211> 353
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-A9

<400> 1026

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 accaaggcaa ccgggtcctc cccaacaacc ggaacccaac tgcaacaaga agaattacaa 120
 gtaatgttcc aagaatgtaa taaccgggta acaataacca aaggttggtgc ctttgccaaa 180
 ggtaaagggtg gttaatttcc aatgaacctg gaagttgtaa ttgcctctgc attcaggctc 240
 gcttggtttg gatgcgcatg gcaagttctc gattaatcct aatcaagatg tagtggcgat 300
 ggtttggtgaa cactccctat gtagtgctga atgatcatgg tgttttcttc ttc 353

<210> 1027
 <211> 390
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-023-Q1-E1-B1

<400> 1027

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 ggaaatagag agttattttg actgctcagc ttcagatctt gtgctgggtg gtgacagata 120
 ctttactgat gttatctatg gaaataggaa tggttttctt actgtattta cagaaccatt 180
 gagttttgtc ggtgaatctt acattgtcag aaaggttana aagctggaag cgtacattat 240
 caattattgg tacaagaaag gacacagacc aattaagcac cctttgctcc ctgatgagag 300
 aacgattgtg aagtttgatc cgtgtgacgg cccagtctca cctanagcat agcacagtga 360
 tatgtatatg ttgttaccaa ctgatacgct 390

<210> 1028
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-B11

<400> 1028

cggtccagat atccgggtcg acgggttggc aggccgaaag agaaaccagc tgatccgcgc 60
atcacaatta aaagggcagt gcgctgcagc agatgtaaag gctatgggtca caacaaagca 120
acttgcaaaa ttcctatcag cggcgaagcc ttgccgcctc tgccaccagc tgagctctcc 180
gatgtacaca ataaggtgga gagttgctct tgatgttccc tgtaagcaaa cgctgctatt 240
tttctttggg aacctgcggc atagtagttg attctagctc caagttgctc tgtattattc 300
actgttttgc ttaggctagc gacgtttgtt tagtaaatta aacattgtga tgtgcaccat 360
tagagaaaca ggggaaattc tgccatgttc cgatgccagc tctattgctg ttgtatttac 420
cttcctcctg ccgtgcgtct gt 442

<210> 1029

<211> 342

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-B2

<400> 1029

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ttcccctccg gcaaccatgg ctgggatggc atcacgtgc gaaggcaaga caaccggcga 120
caaaggctac tgtagtgtga tttattcacc ctatcgacag tcgtcgctc ttcctcctcg 180
cctggcctac ctgttccaac acttttgtct ggacaagatc cgcgcgatta tgaacagttc 240
tgatggtaag acgttcgatc aaacgatcga cacgttacga gaggaaatga ctgctttcaa 300
acgtgctcat gatgtactct acatcgtcta aggcgacgat cg 342

<210> 1030

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-B5

<400> 1030

ggtactagtc aggaattccc gggtcgagcg ggattccaaa atctttctcc cctctcgctc 60
tctccacca ccaagaatac caggaactcg acctcgagc agcaacgaat ccgcgcgcgc 120

ccggcaaaag ggatccaaag ctccaatggc tggcaagtac atcgtcgccg gcctcgtcgg 180
ctcctgtgtc atctcgtatg cctgtgacta aatcgtttct caaaagaaga tcttcggtgg 240
caccatccca aggactgtgt ccgacaacga gtgggttaag gcgactgagc atatgttcca 300
ggcctggccc caggtecgctg ggccgcccgt catcatgaac cccatcagcc gccagaactt 360
catcgtcaag gacctcaagc cctgatgctc aagatcctaa cgtttgccgt cggttggaac 420
cttta 425

<210> 1031
<211> 440
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-023-Q1-E1-B8
<400> 1031

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agccccggtca agaattggag ggcgaggcgg aggagagcgc agatcgagag gggaacggcg 120
acgacgctgg gaaggaagat agtgggtgta aagatctggt cctggtagag gaccctgtcc 180
tggtcgagga tccagaggaa gcatttcagg aagaaatgag agcgcttttg gcgtctgtcc 240
ctgaagggtgc cggggcatca ttactgca tgcagctgca ggagctagag cagcagtctc 300
gggtatacca gtatatggct gcccggtgtc ctgtgcctac ccatctcgtc ttcnccatct 360
ggaagagtgt taccggtgca tcctctgaag gcgcgcagaa ttaccctaca ttgatgggat 420
tggcaacact ctgcttgac 440

<210> 1032
<211> 399
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-023-Q1-E1-C12
<400> 1032

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ttatcttccc gcggatctct aaccagcaa catccctgag ttgagcacct tcggagaacc 120

tgctgtagac atanggtcag aacttgcaaa agaaagaaaa aaccaatcaa cagcgtaagt 180
 tgttaaagga ataatgccca aaaggcatta ttaaattggt aatttaanat tccctaanac 240
 catgataaag gttaataatc catgctagaa ttgtattaac cggaaacatg atacatgtgt 300
 ggatacattg acaaaacacc atgtccctag taaccctcta ctacactagc tatttactca 360
 aatatggtaa agtttccaac ccatacacat gtgttgaca 399

<210> 1033
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-C4
 <400> 1033

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 accagccgac acagcttgaa gtccttgga gatatgtcgt gcgtagcacc tgccgaccag 180
 gcatgacaaa gcgtagcacc tgtcgggtcag gcatgacaaa gcagttcgat aacgggcacg 240
 catgcgtctt aataaccatt ctaaaattct ttcatacagc agcaagcagc aacagtggcg 300
 tgcaaaattht acatcccgat atthtttgcca cggcgcaaac tcgaccagta gtccagtagt 360
 agtccgccgt accaagthta tcaacacccg acggctaatt ctagccacta gctaagctga 420
 tgcttctccc 430

<210> 1034
 <211> 222
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-C6
 <400> 1034

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 gcaagcaaca cgcattggcg attggattca caaagatgtc agcgaaagac ataagcaaca 120
 tcaacaaaagg gattggagtt gacaacatgc actaattaaa tgatgggctg ttgaaaatgg 180
 aaccggttga gtaataagat cgccgttgga aacaaaatcc gc 222

<210> 1035
<211> 436
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-C7

<400> 1035

ggtaccagtc aggaattccc gggctcgacgg gtaacttaac ttgaggctat atttttattc 60
accacatgat atgtgttttg cttggagcgt cttgtatgat ttgagtcctt gatttttagt 120
ttaacgcaat catccttgct gtacacacct tttgggagag acatgcatga atcatgatgt 180
attagaataa tctatgtgct tcacttatat cttttgagct agagaatatt gctctagtgc 240
ttcacttata tctttttaga gcacgacggg ggttttattt tatataaatt gttgatctct 300
catgcttcac ttataatatt ttgagagtct tttagaacta catggtaatt tgctttgggt 360
ataaaaattag tctaataatg gtgggcatcc aagatgggta taataaaaac tttcatataa 420
atgcattgga tactat 436

<210> 1036
<211> 202
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-C9

<400> 1036

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cttcaacgat gacttacagg ccttagtggc aggccatgca gcaggctccg cggcagaaaa 120
gcgggcgctc gagaggatcc aagctgacag ttgcgctgca tgcgacgtca aagatcttcg 180
ataatgtcac cgaaattcaa tt 202

<210> 1037
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-D1

<400> 1037

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 ctgtgagagc aattgaaaca aaatctcaag tagatgatca gcaatggctt acttactggg 120
 tgctgtactc gtttatcact ttgtttgagc tcacttttgc tccgatactt gaatggcttc 180
 cattctggcc ctatggaaaa ctgtttctca actgctggct agtctttcct tgcttcaatg 240
 gtgctgccta tgtttacgag cattttgagc gaccaatgtt tgtgaatcgc caaatagtca 300
 acatctggta cgtcccaagg aaggagaagt tgagtaaatt tgatgacgta ctctcagccg 360
 ctgagaaata tattgaacta aatggaccgg aagcatttga gaa 403

<210> 1038
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-D10
 <400> 1038

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 tctcgttcaa gacgtccaag tgtgtcgaga tctagagatc tctgttggtt tttttcatca 120
 aaaatgccaa agcgggaagaa agcctgggtt cgtgatgcag atagttttga aactcgcatt 180
 acacttgagg cagaccgagg attccttaac ctcttgacc ggacgcaaga cagtctcagg 240
 aatgcacgaa acaatgcgcc aaacatgacg acgaaagtct tgggtgggtt tgtagaacc 300
 ttctactttg atgaagaatc taatgctgat gtcattgatg gcgaaatgca aattgagtat 360
 gatctagaac agatcaaagt ataccctatc acagt 395

<210> 1039
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-D11
 <400> 1039

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 gctggcatag gaggtgggct gggccagtag gtgggcctgc taggtgggct tccaggtaag 120
 tcctctgttc ctttttgttt tctctttttt atatgctctg ctctgtgtat tgaaatgatt 180

aaaataccat tccatttcta aaaatcctgg aaataatcag aggcacattt gaaaatattc 240
tcaactgcct aaaagtactt ccaagagtat ttgagcactt taaaatattt atagtattga 300
aaatgcccaa attcaaatac ttatggcttg ttcaaaaatc cagaatggct ccataatttg 360
caagaccatt tttggcaggg gtttaaacca gagccaaaaa tgggtgggctt ttatgaaggg 420
catttttggtt tcattgaaat 440

<210> 1040
<211> 395
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-D4

<400> 1040

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gacatgcctc agcgagtcca agtcgcttg caaattggcg gtcaggctca tcttcctcca 120
tgcaaccgcc aaggggttca aatgcacgcc gccgatgacg cgggtggctca ccgcgccagg 180
cagctcagcc ggcagcattg gccgggagca ccggctggtg ttcacgcgg cgaactcgaa 240
gctggagagg agggatttct caaacgacga cgacaaggac gtggagctgc tgacggaagg 300
agacgacgac atgctaacag agactggcaa tgtggatccc tctcctcct cagtgtagca 360
ttccattcct gctgctgctg ctgctgctta atttc 395

<210> 1041
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-D6

<400> 1041

gtaccagtct agaattcccc ggccgacgag gagatcaacc gcgctcgccc tctctggttt 60
gctactgctg gtgctcatcg gactccccga cgccgccgtc gccgccaaca tgaccgatgt 120
ctgcgtcaag gccgccgtcg gccaccccga cacgctcggc gactgtccct tctcccagag 180
gggtgctgctc acgctggagg agaagaatgt gccctaccag atgaagctca tcgacgtcag 240
caacatgccc gactggttcc tgaagatcaa tccggagggc aaagtgcctg tgtataacgg 300

tggtgatggc aaatggattg ctgattctga tgtgatcact caagtcattg acgacaagta 360
cccatctcca tcaattgtca cccctcctga gtatgcac 399

<210> 1042
<211> 439
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-023-Q1-E1-D7

<400> 1042

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gagtccacct ccacctcagc cttctcggca gcgagccggc agcctcgtag ctgcacgtcc 120
ctctccgctc ctcacctcgc gccgcgcca cactcccag ggagttcgtg ctgagctcca 180
tggacgagcg gtctccgga tccgtcgacg ccgatgggtt cccctcctcg cgtcgggaag 240
gattcgggca tagtaaatec acaactgcaa cttctagtcg ttttagaggg caagatcacg 300
cttttgtaag atcatactcc gataggttgc ttaagtgtga cctcacgttg gatatgctat 360
cagaaaatga gaagatgaag ataattgaga aattggtaaa gatccagaaa gatggcacac 420
tggaggtana tgtgaccgc 439

<210> 1043
<211> 403
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-D8

<400> 1043

attcccgggc cgacctgtca tcaaaagttc agcatgtggg tgccatggag agcatcagcg 60
tgacgatggc ggaggacgga gctttgcacg agcctgacca cgacctctcc gacgtgtcga 120
tgagcagggt tttctctcag ctgatcaaag ctgaggggag gtgaaaacgc gccggatgat 180
ctgttagggt accggtagag gtgtgggcaa gccttgatt tttattttct tgttgaagtt 240
tacctgagat gtgtcacgtg taattgggtt tttcatccct tgtaattgta ctgaactacg 300
gtttggattt ctgatggcct taccttacc acttctcgcg gcacatgatt tagcggatat 360

aggatatcttc ttgtatggaa tctattcggc tctaaccata ttc

403

<210> 1044

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-E1

<400> 1044

cggttcgacg ggaacagcga tgtccgagat tccggtgcgg ggcgacgacg tgcaggtcga 60

gcagatgagg agggagctca agatgagtga gaaggggatg atttacgtga aggggatatt 120

cgagacatga ccgatagctt tgatgtctgg agtatagtga ccaagcaagc agttcaaagc 180

aggctttcct gtgatgcggg gcaaaatgaa ggtgggagag gaggtgaggg tgggttttgg 240

taatccacgg gcaaatctgt gtcttggtt cgagaaatag agatggtttt tgtcgggaat 300

tcggtatggc tcttaggtcc aaatgatccc agtatctgta ccctgtttgt atatcaacta 360

cgtacataag agtttaacat gcattccgca aa 392

<210> 1045

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-E11

<400> 1045

cggtccagat atcccgggtc gacgggtaag gtgccttttag gtcattggttc tatactcagt 60

gatgctgttg gagttgatgg actcgcttat cttccaagcc ttccgttggt accgttgtaa 120

gatggcctta agccatattt attgcaataa gttctctttt gagacattcg atgtaataag 180

tgtgtgattg ctattctggt ataaatcctt cgggtactat gagtgtcagc attattgatc 240

tagggatgac acttatgcac agagatcaga ctgggtgagg tctggtcgct acaagatggt 300

atcagagcac acgctgactg taggacacga ccactaagct aaagccctag atcactactc 360

actcttctca tgtctgactt ctcacttttt ctactctttt aggatggcgg atgcaaggaa 420

caagttcacg caaccggatg aagatac 447

<210> 1046

<211> 406
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-023-Q1-E1-E5

 <400> 1046

 ggtaccggtc aggaattccc gggctcgacgg gtcaggtatt tactcgacaa acatagaaac 60
 cagagtactc tagaaaccag ctctgggtcca catgggttggg atttcatgaa tcaaactggg 120
 tggagttttc aacatgaacc aagttcctga aatcagcatg attcggatct tggatttccg 180
 aaatgaatca agtttcagaa accggcaata tccaaatttt agaaaccaac gtgatggaaa 240
 gaataaatga tttggtgacc agagtcagat tctagtatgt tgcaattctg cagagacact 300
 aaaagggtggg gcaccattac cgagtccttg tgctcactga tttcacacct ttgtaatgct 360
 aattgaattg aaaatgagat gagaggtgat aacagacatg ctttta 406

<210> 1047
 <211> 372
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-023-Q1-E1-E6

 <400> 1047

 attccccgggc cgacaggaca cgtaaacatc ttttcggcag cgcctccaca aatctcgtcg 60
 ttccaccacc tggttgaaca gatgatagtc catacatgga aactgctaca acctcagcga 120
 ttgacatact gatcgtgggg ggaacgggaa cattcatcgg gcattttaca gactgcgtct 180
 tcgcccattc ctagtttaat atcactgaaa tgtacattgt gttttggtta ctgtaccaac 240
 tcgatatcag gtcatacagc atcatcacc ggccgaaatc ggccggcaat gtggttggtt 300
 tttgttgctt agattgctat gtccgcatat gagtggatcc gcctgtccat gtctcagcaa 360
 caacttcccg tc 372

<210> 1048
 <211> 343
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-023-Q1-E1-E8

<400> 1048

attccccgggc cgacgggggaa gagattcgtc agcacgacgg cgtgggtgacg atcttgatgt 60
tctaccgtcg cagggcttcg cctaagcacc gctacaatat tatcgaggat tatggtggag 120
gggggcaccg cacacggcta agagaacgat cacgaagatc aacttggtgtg tctagagggtg 180
ccccctgcc cccgtatata aaggagcaag ggggaggagg ccggccctag gaggggcgcg 240
ccaggagta tgattcctac tctacttgg agtatgtttc ctcttttct agtccaacta 300
tgagaagggg ggaaaagggg ggaagagggg aaggaaggga gac 343

<210> 1049

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-E9

<400> 1049

gggtcgacgg gggagaagat ctggcatcac actttctaca acgagctccg tgttgcacct 60
gaggagcacc cagtacttct gactgaggca ccctgaacc ccaaggctaa cagggagaag 120
atgacacaaa tcatgtttga gaccttcaat gttccagcca tgtatgtggc catccaggct 180
gtgctttccc tatatgccag tggacgcaca acaggtatcg tggttgattc tggatgatgg 240
gtcagccata ctgtgccaat ctatgaagga tatgcccttc cacatgccat ccttcgtctt 300
gacctcgctg ggcgcgacct aactgactgt ttgatgaaga ttcttacgga gagaggttac 360
tccttcacca ccaccgccga acgggaaatt gtaagggaca tc 402

<210> 1050

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-023-Q1-E1-F11

<400> 1050

cggtccagaa atccccgggtc gacgggaaga gggcgccagc tcagacacaaa ggcattgaggc 60
agaaagtgat ggaagaaata ttcaagccta ctgatgacag caccctcagc gtccttctc 120
ctgagaagaa ggtgcgaagg atcagagact ccccttcaa caagaagagc ggctcgggttc 180

tgcacagaat ggcgagctct tcaacagga cagaagatgc tgaggctcct ccctccggca 240
 gctctgctga gccagttgta ccgagaagga caacaaggga gaggaaggca gcagtagtct 300
 acgttgcttc tgagagcgaa gatgatgagt ctgaggatga agatgtgtcg gaaccaagcg 360
 acgatgacga cttctccgaa gatgactaga ctccttggct caaacgccca tacattg 417

<210> 1051
 <211> 409
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-F2
 <400> 1051

ccggtctaga attccccgggt cgacgggggt ctttatgact aatgtgagtc catggattat 60
 acgcactctt acctttccac aatttgctag cctctacggt accgtgcatt gcactttctc 120
 acaccaagac gtgggtgcaaa cttcgcaggt gcatccaaac cccgtgatat gatacgctct 180
 atcacacata agcettatta tatcttcctc aaaacagcca ccatacctac ctattatggc 240
 ttttctatgg ccattccgag atatattgcc atgcaacttc caccgcttcc gtttgatgac 300
 ttgagcattc attgtcatat tgctttgcat catcatatag ctgacatagt agttgtggct 360
 cagccaccgt tcatcatttt tcatacgtgt tacgctagat cattgcaca 409

<210> 1052
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-F6
 <400> 1052

gtaccagtct agaattcccg ggccgacggg actccggaac tgaagaggtg atcagattgg 60
 gaggcgccag gtggaggtga ccgccagaag ccgagaacca tggggattct attcttgttg 120
 tactaacatg ctatacgccg cgggcgttgc gcagcagcta atgggtttcg tctcccctgc 180
 gtcctctgc cttcccttgg gaaaaatgtc tccgactagc gtgtacaatg caaaatctgt 240
 tgggaggcta agccgttttag tggcgacgac agataaatta tttgttctact ttgaatagcc 300
 aaattctgta tctgatatat gctttatgcg ttgtgagctc aaaacagaca tttgcttctt 360

tgcttgtgtt gtcagtgggtg atatgcgggc cctgctcgtt tcacatgtat taagaccgta 420
 tgcagtgcaa agtgcttgat aaaaag 446

<210> 1053
 <211> 373
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-F7
 <400> 1053

ggtactagtc tggaattccc gggtcgacgg gagaagcgca agaccatcaa cggcgacgac 60
 ctgctctggg cgatggccac gctgggcttc gaggagtaca tcgagcccct caaggtttat 120
 ctgcagaagc acagagagac ggaggggtgat agtaagctac ctgggaagtc tggatgatgtc 180
 tctgttaaaa aggatgcact gggtcctcat ggaggagcaa gtggcacaag tgcgcaaggg 240
 atgggccaac aagtagcata caatccagga atggtttata tgcaacctca gtaccataat 300
 ggggacatct caaactgaag atatggacca tctccgagac tgctgctact ctgctaagcg 360
 ggttttcgtc atg 373

<210> 1054
 <211> 345
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-F8
 <400> 1054

gtcgacgggg gaacgattgg agactaaacg aattggtata ccaatctata cctcaccaac 60
 atctatttcc gaagtttgtc gcaccacata atcaatcaat gagatgggta actacagtaa 120
 ctctagtact actgcaagta ctatcatcac ttcaagccct tgcgtgaaca agtccgggtc 180
 aacatattgc atgctaccgt ttctgatcaa cgctgcatg tgccgattct tcattctcaa 240
 aggtatgggc aggtggcata actgagactc caacgacatg atgatgccat ctcaactggt 300
 gcatacatca ccaccacaac atctgaattt gatgtattgg tttga 345

<210> 1055
 <211> 278
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-023-Q1-E1-G1

<400> 1055

ggctctagaat tcccggggccg acgggggctat gatattagca ggaaaatatg acccg cattg 60

ccatcttatg caggctaaca ccggtaacca tccatcgac acttggcgag caattattat 120

tgggcgaact gtcctaaaca tgggtctcat caaaagggtg ggaacgggca cagagatcaa 180

tatttgggaa gataaatgga tcccgctctaa tccgtcacta cgcccccttgt ggaaacctaa 240

taatactcac cttactctag tgtgtgacct cattcgca 278

<210> 1056

<211> 404

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-023-Q1-E1-G12

<400> 1056

gggtcgaccg ggctgtactg ggacgtggca gctactgcct aaaggctctgc aacatggagg 60

caagtggcct ccacctctct ctcatactcg ttgctctct ctctagttat aaaatatctc 120

ctttttacct gaaagttaaa gaaggcaaga gaanganggg taatatggac agcatgctgt 180

ctgtcaaaga ttattcggtc caggagggac tgctcggtcc ttacaagaaa ctggtagcat 240

accagagcat tataatcaag aaaagtangt gctaattcaa tgcattccc ctttatgggc 300

accctgagat aattagctag acgagtggca taaattccac caaagaaaac tccatcctta 360

gcättaagat gtaacctctc cgcagtaata cccccaagtt atat 404

<210> 1057

<211> 363

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-023-Q1-E1-G3

<400> 1057

ggccaagaaa tcccgggtcg acgggaanaa gaaaggcaag aagaacgtgg agaacttcaa 60

gatttacatc ttcaaagggtg ctaagcaggt gacccgacat cgaatccctc caagcatgtc 120
atcatgaact ctttcatcaa cgacatcttc gagaagctcg ccggcgaggc ggccaagctt 180
gcccgtaca acaagaagcc accatcacgt cacgggagat ccagacctcc gtccgcctcg 240
tcttccccgg cgagctcgcc aagcacgccg tctccgaggg caccaaggcc gtnacaagt 300
tcacctctc ttaggtcttt tgtcaaattc cttctggcgt gtgatggatt catgtttgac 360
tgt 363

<210> 1058
<211> 387
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-023-Q1-E1-G6
<400> 1058

agtaccgagt ctagaattcc cgggccgacg gggcagcggc tgaagctagc ccggacatcc 60
ggaccgccgt ccggatcatc cagaccacgc cagatcatcc ggtccccct ccggatcatc 120
tggtataaccg cgctgaggat acccgaaggc ttctctgaa gccagatcat ccgggccacc 180
tcccggatca tccggacgac ggccggatca tccggacccc catccggatc atccgggctt 240
tgcttgcgtg caacgcttcg ggccaaggcc catgtacca ttcgccccct cacttaccac 300
ttcgccact agactataaa tagacctcct ccacctcctt tctagggtta gcaaatatga 360
tagctcattc ttaggtgagc tttgctc 387

<210> 1059
<211> 432
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-023-Q1-E1-G8
<400> 1059

aattccccggg tcgacgggac tcgaaaaaac ctctcgaaca gcgaccggct ctcaccctat 60
catgacgggc agtttttagct ttctccattg aggtgctcaa cctagctcaa ctggggcaca 120
atcgagtggt ttctcccagc gctaccttag ccgatataat ggaacgtaat gtacaaaaac 180
atgggagccg ggcaaaccca actattgacc caagacatga ttccgagctg atacatataa 240

tgctataagt tcggggtgcc gcacttgtga aagtgttcgg acttatcaca ccataatttg 300
 gggtacttaa gtccttggtg tacttagccg taccaaagcg tatgggtgca acatgtcata 360
 agtgaacatg tataaataga aaaaggaatg caataatagg caaaaagcga tgcacggtt 420
 attcaaaaaa ta 432

<210> 1060
 <211> 374
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-023-Q1-E1-H7
 <400> 1060

gtaccgagtc tagaattccc gggccgacgg gagctgaatg aagaccctct tctgccagtt 60
 atttttgtta attcagacag attcgattga gatggcccaa gatagataaa ttccgagcgg 120
 aatttgact agataatatt gactcatttt cccatgtgga attttgagt tttgtgctgg 180
 ccgacgctt gtttgttgaa tccagataga tttaagcatt tcccagctga caaaaaaaaa 240
 agaaaaaaaa aaaaaaaaaa aagaaagaaa aaaaaaaaaa aacataacag agaaaaaac 300
 taaaataaaa aaaaataaac aaaaaaaaaa aaggggcccc tcaaagggtt caagcctaac 360
 ttccccgtga atgg 374

<210> 1061
 <211> 384
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-A1
 <400> 1061

taccggtcca gaattcacgg gtcgacgggg gagcaagtgg ccatcaaaaa gatcgccaac 60
 gccttcgaca acaagatcaa cgccaaccgc acgctgcggg aaatcaagct gctccgccac 120
 atggaccacg agaattattg tgcaataagg gatattatac ctctgcaca aaggactgca 180
 ttcaatgatg tctatattgc atatgaattg atggacaccg atctgcatca aattattcgc 240
 tcaaatcaag ctttatcgga ggagcactgc cagtatttcc tttatcagat ccttcgtggc 300
 ttgaagtaca tacattcagc aaatgttctc caccgagact tgaagcctag caatcttctt 360

ttgaatgcaa actgtgacct aaaa

384

<210> 1062
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-A11

<400> 1062

gactgctacc cccagataaa aaaactacag taacacaccc aatccacgac atgcttccca 60
catgatacca tatattacgg tgggtgaaca aattactgcc gagcaattga tagaaaagtg 120
catagttatg atagtatcta tgcacgacca tgaacatatg catcacgtcc gtgtcaagta 180
taccgaaacg attctgcac tactactatt actccacaca tcgaccgcta tccagcatgc 240
atctagagtt ctaagttcat aagaacagag taatgcatta ggcaagatga tatgatgtag 300
acaaaaaaaa aagaaaaaaaa aaaaaaaaaa aagcggccgc tctaaaggat ccaagctt 358

<210> 1063
<211> 402
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-A8

<400> 1063

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aatgggttcc agaagctcga caagatcaag gatgccaaacc gccggagcat gcagctcgaa 120
gagctcactg acaagatgcg agattgcaaa aggcttatca aagacttcga ccgagttgtc 180
aaagatgagg catgcagtgt tgateccaac actgctaaat ttctgaacga gagaaagcag 240
tcgctgatca aggaattgaa ctcttggtt gctctgaaga aacaacatgc aagtgaaaat 300
aagcgagttg atctttttga tgcccaagt ggtgaagatg ccttttggtga agaaaatgtc 360
ctgtagcat caaatatgtc aaaccagcag ctaatgcagc at 402

<210> 1064
<211> 374
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-024-Q1-E1-B10

<400> 1064

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cttgagcaga ggcctccggt tcagtcagga ccggctcttc gaccggttta gtcttctttg 120
ccctcttact gagctttgct tgagcactga taggacaaaa ggtagtaca aaagcatgag 180
taaagataag cacaacataa gatgatcatc attaccggg tgcggtcttg aaagccggca 240
ggttcgattg catagaatca ccagtggaag gtgaagtgtc ctgataattt gaatcagaag 300
aattgagcgg ttgacgagta acgcccgcga aaggatgaaa aggggtataag ttggagataa 360
cctcggtcgg gcgc 374

<210> 1065
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-B2

<400> 1065

gtctagaatt accgggtcga cggggattcc catagcatgc acgtatggtg aaccgctttg 60
tgatgaagtt ggagcacaat tttatttatt gattgtcatc gttatgagtg gcagtcggcg 120
acgatcgatg gtcttttctt accaatctat ccgcctaaga tcatgcgtct agtgctttgt 180
ggttaatggc ttgtagattt ctgcaataat tatacgagtt ctgtattgac aatgttgagt 240
ctatgcatta tacgcactct catccttcga tcattgctag cctcttcggt accctgcatt 300
actctttatc agcttgacag ttcgttccag cttcgctgt gcacgaaac cccgtgatac 360
gatatgct 368

<210> 1066
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-B4

<400> 1066

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cctcgccgat gcttcacggc tagcgggatc ccgagacatg ctgcggccgc gtctggtgct 120
 cttcggcgac tccatcatcg agcagtcctt ccgccctggc ggttggggag cggcccttgc 180
 ggatacctag gcccgctatg cctatactgt tgtcacaggc tacggtggat acaactcaag 240
 atgggcgctg ttctgatcg accgcatctt ctccctggct ggcttgccag ccgttgctac 300
 gaccatattc attggcgcta acgaggcagc gcttctaaga ccatcaacc agcagcaaca 360
 tggtccggtt caggagtcaa tacagaatct caaaccaatt gttaatcacc tg 412

<210> 1067
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-B6
 <400> 1067

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 agcttactga caagatgctg gactgcgga ggcttatcaa ggactttgaa cgagttgtca 180
 tggatgagggc gggcagtgtt gatctcaaca ctgcgaaatt tctgaacgag agaaagcagt 240
 cactgatcaa ggaattgaac tcttatgttg ctctgaacaa tgaacatgca agtgataata 300
 agcgagttga tctttttgat gctccaagtg gtgaagatgc ctttggtgaa taaaatgtcg 360
 tgttagcatc agatatgtca aaccagcagc taatgcagca tggata 406

<210> 1068
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-B7
 <400> 1068

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 aaccagctgc ggcgcgatct gtgcgatgga attgcggttg cacgtcttct gaacgcgaca 120
 atggttctgc ccaagtttga ggttgctgca tactggaacg agtctagacg tgtttgatgt 180
 tgatcacttc attgagcaaa ctagaggtta tgtggagggtg gtcaaggata tgcccaggga 240

gatatcgttg aaagagccat ttaaggtcga ttgccgaaaa cagaaaggac attttgatta 300
 tgtagaaaca gttcttccag ctcttttaca acatcgatat atttctctga cacctgccat 360
 gagccaaaga aaagatagat atccatcaca tgcgaaagct tggt 404

<210> 1069
 <211> 412
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-B8
 <400> 1069

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 atacagcgcc cgctgctcat tcaggaagcc aggatcatcg gacacctatg agcaccttcg 120
 agagactgag actgcatgaa acggtaaggc cgcgcttggg ctctctgggtt tatttcacac 180
 ttgtattaag atacaagtgt aatttactcg tcatcggaac caacgcgtaa aatacaggcg 240
 taatgaaacc gacggcccg ggtctgtaag taagaccggc gggttacgcg tgtaatttga 300
 gagaccggtg tatattttac tagtcgaaat cgaccaacca agcgcttcgc ctgagaccat 360
 ctgcttttat ttacaagcgt cagttttaca agcggttttg gttggcaaac ga 412

<210> 1070
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-024-Q1-E1-C10
 <400> 1070

ccggtcaaga aatcncgggt cgacgggaag ggaggcaatg ggctgctcgc ggccaagacg 60
 acggcggccg atggcgccgc cgacaaggac aatgacaaga agaatgcgcc tgtgtctcgc 120
 tcctctcgcg ccgggattca gttcccgggtg ggccgtatac acaggcagct caagcagagg 180
 gtctcggcta atggccgtgt ggggtccact gccgctgtgt actctgcaac aatccttgaa 240
 taccttactg ctgaggctct tgagctggcc ggcaacgcca gcaaggatct caaggtgaag 300
 cgtgtcacc ctcgccacct gcagcttgcg atccgtggag atgaggagct ggacaccctc 360

atcaaggcca ccatcgctgg tgggtggtgc atccct

396

<210> 1071
<211> 369
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-024-Q1-E1-C12

<400> 1071

gacgggtgta tgactatggt aatgagtctc tcccctttct ggactaattc ctccggttta 60
tataggcacc gggaggatct agggttacac aaggtcngtt acaaaggaaa agaattctaca 120
tagttggttg ccaagcttgc ctcccgctgc aacgagagtc ccatccggac acgggtgcag 180
tcttcggtct tcgtatcttc acagcccatc agtatggccc atggctaaca cgctggacgc 240
ccgaggaccc cttagtccac gactccctca gtagcccctg aacctggctt caatgacgat 300
gagtccggcg cgcagatttg tcttcggcat tgcaaggcgg gttcccttct ccaagatagt 360
ctccggata 369

<210> 1072
<211> 171
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-C7

<400> 1072

aattccccggg tcgacgggct ctccggaggta ctactctggt tttttcagat ttatttttcc 60
ttcaagtact ttgttttttc atggcattgg ggtttttctg gaaaattaca tgaccaccaa 120
ttcaaaatgg ccttccaatt taaaaggat aacaaaaat ttcttgcaac c 171

<210> 1073
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-C8

<400> 1073

attccccggg cgacgggcac tccgatgtca aatccagggt ttttcaaagg gaattttcgt 60

acattcactc ggtttcatca gggcagtgaa gtttctcatg tataatatat tcgcatcagt 120
 tgcataataag tcatgctact tgcacagatt aaccaaatat tatcatgccca catgaatggg 180
 agattatatc tccgaatcat ttacatcagg aagggatgag gaactccaac acatgtactg 240
 gccagccat aatgtttgcg tacatgtagg attgtaagga tctagcataa attttcttgg 300
 tggatggggg ttttagaata tgattcattt tctgattcca attgacagaa gacgtaaccc 360
 aatagtatag ctaaatacaga gattcggttaa ctgaatcca 399

<210> 1074
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-C9
 <400> 1074

cggcacaagaa atccccgggtc gactcccact tctccaatgc atatcctttc atttacttct 60
 cgcgttcgat gaagttgtag tgttgaaatt ttatatggca aaataccaga agagtatgac 120
 tcgtgaaaac tttcgagttc acacatatta aggaaggcat aggttcaagc catcggggct 180
 tcttagaaca tataaccaga acttcagaag taaataacac aagctcaaaa gtagagcatg 240
 gttgataaag cagaggatac aatttaccaa aggctttata tattcatgga aaagctcaca 300
 aggttatttg aatatgagga tattgtgaga taaactccaa caaaggatcc ggtgggtcttc 360
 aagggatctg atgtgagcat cggtactcaa ccagaggaaa aaaga 405

<210> 1075
 <211> 124
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-D1
 <400> 1075

ccacacccta tagtgagtcg tattaagtgc attcggcttg tgtgggagac atgccgcagc 60
 gagttcaagt cgcgtcagca cagtggcggc cagggtcatc ttctctatg cttccgctaa 120
 gggg 124

<210> 1076
 <211> 271
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-D5

<400> 1076

gggacacccg tatagtgagt cgtattatgg agtcagtgag aacatgatac atatttctgc 60
 aaacgtctgt gagaccagtt aactgcacg tgtggcaaca cgcctcagtc acagccgcgc 120
 acaatcaggc aatggcttat tcaactgatct acgtgtgcgc gaggtagacc tgctaggggc 180
 ataaccatgg aagcaccccc tctatcaggt tactgttaag caatgattca gaggttgaagt 240
 tcattctcttc atagcttacg tggcttcac a 271

<210> 1077
 <211> 463
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-D7

<400> 1077

gtaaggtcta caattcccgg gtcgacggga gctttacggc tttgctctag agaagatcgg 60
 cagcaccaag gctgaatacc gaagggttca aactttggag ctggtggact gcatattgaa 120
 atcctggggtc ggcgacgatg tctcgagcgc atcaaagggtt ttgaagaagc atatggctct 180
 gctgtgcgag ctgatgcagg aaatcctcac aaagatgccc gaaaacaagt cgcgtcgcca 240
 ggaggtgcgt aggttctgca cgcgggctct gcaaaccgtg acgaggctca acctgaaaga 300
 gaagtttcag aagaagctaa gctcggaagc gtacaccctg tgtgaggcac agctgggagc 360
 tgcatttggtt cccttccgac agtgatgcat gtgaattggt tcccgaaaac attgaaaggg 420
 gccccaaatt taatttgggg caaatttaaa aaaaaaaac aaa 463

<210> 1078
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-D8

<400> 1078

gtacagggtca agaattcccc ggtcgacggg acggcggtcgg agtcggcggc gcgcatcttc 60
 cggtcgatcc agatggagag gcagcagaac ggcccgtgac cgagcgacct catgcggtgg 120
 ttggccggca gaaagaaaga aatgaaggaa gaaagcttag ccaattagcg cttgggagta 180
 tgttgttatt tttgagcagg caatagcatt cctatatatt tgtccctcgg cgtcggtaaa 240
 agcgaatddd tggcgactgt aaatatgcaa agcaaagcag gacttgtatc tatctatcta 300
 tctatctgtc tatctatgcc acaatgaaaa ctgttaactg ttagtgtagg ggtgtatgtc 360
 tcaggcaaaa agaagtgaaa cctgggagtg atgtctctgc tgtattatct atgtatgtgc 420

<210> 1079
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-E11
 <400> 1079

ggtcaagaaa tcccgggtcg actgcccga cgccaaagcc ttagcagcat tcaaacagaa 60
 cgtgtgagac gaatggctcg acacctcggc caagaaaagc caagaacaat ggccgcattg 120
 acaagcctca tgacctgctt ttgcgcggga gaggatagct ggctggcaag atgcagtacc 180
 aatgacccaa gtacatccga agtcagggat ggaaatggga aaccgcaaca cagcaaggac 240
 cagcacagga ccaagggaaa tagcccgaag agcacagcag tcaacgcccg attcaaaagc 300
 tctcggcaga atcataaaaa actgcccctt aaggataaca gggacgagct atctaactta 360
 gacaaaatct tggacaagat atgccaaatc cacaatatac cccgggaaac cttgaaaccc 420
 ataccacag a 431

<210> 1080
 <211> 367
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-E2
 <400> 1080

ataccgggtc gacggggatg aatgaatcca ttgtgagaag agcccttgtg atcatgcacc 60
 agagggacga agtggagtac aagagggagc gccatgtgat tgtccgcaag gcttgagctg 120

aactgaaccg atggagctac catggaaccc tctggccatc tgatgtgtgt gtataagtag 180
 tgctgacact gcagcccggtt tcctgaggaa atttggtggg tcgttgaaat tgagttgtag 240
 ttgtactact ttgagctgta gctgtagccc taaatcatat tgtgtcgaac tgaagatgta 300
 cccagtaag ttcattcatg aatgcaacat tttggcggtc tgcagctgag cagagtcaat 360
 gcctaag 367

<210> 1081
 <211> 275
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-E5
 <400> 1081

tacaacaccc aatagtgagt cgtattaggt ggtgcggatc atgaaggtgt accgtcccat 60
 ggattctcat agacacaccg gtcattggga tcgacgatta ctttctgcag taggaacagc 120
 atatggctag cagtagcatc acgaacctca tcttgtgtga tctacaactt cactgactgcc 180
 agcttacgta gacgaccatt gtggacgagc ctgcgacttc tacacgtgcg ccaggtacta 240
 ggattcatac tctacggat catacgtttc ctct 275

<210> 1082
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-E7
 <400> 1082

caggtacagg tcaggaattc ccgggtcgac gggaagaacc cctgcgtcgc cacctgcgat 60
 aagcgtgcc ccaacgagtg catcgttatg tgcccagggt gcaagaccta ctgctgtaag 120
 catatataca tacatcatgc gtatcaccta tacatatatt cacacatact agctatgtcc 180
 atacaaatta agaagtcgag atgcctaaat taattactta acatttttgt acgagtgtgc 240
 gacttctacc ccggcatgct gtgcggggac ccacgcttca ctggtgcga cggaacaac 300
 ttctacttcc acggcaagaa ggatcaggac ttctgtgtcc tctccgatgc cgacctccac 360
 atcaacgctc a 371

<210> 1083
 <211> 394
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-024-Q1-E1-E8

 <400> 1083

taccggtcaa gaattcccggt gtcgacgggg agcggcatac tttcattgtc aacataacaa 60
 ccaagagatg gcgatatctt ccatgctaca cacattataa gcggttccga aacagactgg 120
 tatagtttag actccccctc caccaacaag catcaatcca tgacttgctc gaaacaatga 180
 gtgcctccaa ctaacaatag tcctgtggga gttttgtag caattaattt gatttggatt 240
 gcataatgca tgtgactggg catcacgggt accagccatt ttctcatgag tgaggagccg 300
 agtccaatcg tcttgagaat aacgcgccta gcatggacga tacagacaac cctaattagt 360
 acatgcacta tacgagcatg cacaacataa tttc 394

<210> 1084
 <211> 404
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-024-Q1-E1-E9

 <400> 1084

ccggtctaga attcccggtt cgacggggcg ctcacgcat catgcatgct tttcccatcc 60
 cctttctctc gggctagctg gctcagggtg ttgccttggt aagacaagat tgtagttagt 120
 atgcatacat gagtatgaca gaccatagtt ggagcacaac aatggcttcc atatcgatgc 180
 tggccacaag aacgagcaca gagcatagtc catggtgctg gcctgctggg agccttgcca 240
 gggccaggca cgatgccaca ccacacgcc aagctgcagc ggtagtgaca cagggtgcaca 300
 gtgaggcgaa ggcgatgccg accggcatgg tgatgccgag cacaggcaaa gaaaccctat 360
 gtttcaacac aaggcataca tcatgtaaat gtttcgctcg aaca 404

<210> 1085
 <211> 326
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-F1

<400> 1085

gggtcgacgg gaaggccgag taggccagta ggagaggaca gatctacgct cccgagactg 60
gtaataataa aggcgggtgga ttttgcctcc actcgggtgat gtattcttcc ttgctactga 120
tagtgattta gtgcactgat atgttcttca aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaag gggccgcccc aaagggtcaa acctaactta cccttgaatg caacttaaaa 300
cctcttcaaa agggtcacca aaatta 326

<210> 1086

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-F10

<400> 1086

gagagtaaaa ggatcggccg gacaagcctt gttcaaatct gtgtattcaa cacacatgtg 60
ccaagtgccg tttttcttaa gaacgagcac cagattagcc aaccactcag ggtgaaatac 120
ttcgacgata aaccagcag ccaacagtcg ggctacctcc tccccaatgg ccttgcgtct 180
ttctttgtta aagcgacgga gaaactgctt gaccggttta aacttgggat caatattgag 240
agtgtgctca gcaagttccc tcggtacacc tggcatgtca gaaggcttcc atgcaaaaat 300
gtcctgggtc tcacggatga actcgatgag cgcgctttcc tattttggat ccaaattggt 360
gttgatgcta aactg 375

<210> 1087

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-F3

<400> 1087

cggtcgacg gggacgtga caagctcgcc cgctacaaca agaagccac catcacctcc 60
agggagatcc agacctcgt acgcctcgtc ctccctgggg agctcgccaa gcacgcgctc 120

tccgagggca ccaaggccgt caccaagttt acctcctctt agatcgcgtc gcctgtatct 180
 agtagcaaat gtagttcctt gctgttggct tagtgcttgt ctgtggactc tggttatctg 240
 caagtaatat tagtcctact gttggaaaaa aaaataaaaa tatatggtaa aacatcaatc 300
 aagacacaac aaggaaagca ataacaagac atcaatatat ggaactgccc aaacaatcaa 360
 gaac 364

<210> 1088
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-024-Q1-E1-F4

<400> 1088
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 ccacatgata tgtgttttgc ttggagcgtc ttgtattatt tgagtctttg cttgttagta 120
 taccacaatc atccttggtg tacacacctt ttgagagagc catacatgat ttagaatttg 180
 ttagaatact ctatgtgctt cgcttatatc ttttgagtta tataattttc tctagtactt 240
 cacttatatc ttttagagca tgggtggtgga ttgtttttat agaaactatt gatctctcat 300
 gcttcactta gattatTTTT gagtcttaaa tagcatggta aattgcttaa ataatcctaa 360
 tatgctaggt attcaagatt agtaaaaact ttcttatgag tgtgttngat actaagagaa 420
 gtttgatg 428

<210> 1089
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-F7
 <400> 1089

gtacaggtct ggaattcccc ggtcgagccc gatctggtgc tcatcctgga agaagcagac 60
 cctgttaggt tggtagatg gatgagctgt tggcagctca cacaggacga tgacaagaac 120
 ctactgaccg cgaaggcgag aaggtcagag aaggagccca gcagagcaac aatcgaatga 180

agcaggacat ctggtaggtc ttcccaatct ttatgtccag acatggcgag gacgcaacac 240
acaacagccc tttcttgctg tctgcagggt gcagcttccc ttgaggagtg aatatatatg 300
gtatatcttc cctcatgacc ctacagggtg agcatcagaa gacatgaaca aataactctg 360
agcaaaatgt gatgacacaa gaatcatgac 390

<210> 1090
<211> 460
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-024-Q1-E1-F8
<400> 1090

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agaagctgcc cctcgcttac aacgcactcc tccagggtca cgcggagatc gacaccgcca 120
cccgaagcc cagcctactc gccgtcctcg caaggcactt cttcccacag ctgtcggcca 180
atgttggagc cggagtcgag ctggagaggg gcaacatctt caggtagacc ctccggggga 240
agaaagccgt ctcttcacc gacgacggcc tctcggcct caacatcaag ggccgcctcc 300
tcgccgacaa gaacttcaag ccgaggagga agagcggcgc catcgagctc gcctggacca 360
tactcgactt cagaaagggc caggacgtca ggatgaaggc cggctacgag ctataccgca 420
agatgcctta tttccagctg atggagaaca actggacgct 460

<210> 1091
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-024-Q1-E1-F9
<400> 1091

ggtcaagaat tcccgggtcg acgggattga ggaggaatac agtcagtaga tttgacaatg 60
tattttaaaa tgacatgtga aatgccttct agccggattg tagatcgttt gtctttgccg 120
accttttcgc ttcaacctcg ggaccctaga gttcggagtg tgtccgaata ctttctcggt 180
taagaaacaa cctgggtatg catggagacc aggcgtaggg gtcattagt ctttatcaga 240
caagtgccca actagttatg ttatattaca tggtagtaa gaaacatctt ccaggagaa 300

tagttccgtt aagggttcct ttccctggga ggcattgcct aaagtgcattg tccggactgc 360
gaaaagagca gaaaaacatc tgggggcaga taaataagta tggaaaaatc aacct 415

<210> 1092
<211> 399
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-024-Q1-E1-G1
<400> 1092

ggtccagaat taacgggtcg acggggatct tgtactactg ctcaacaggg aggagattgg 60
tgacaatgga gttgtctggg aggttgaggt aaagtaggac ttacatcctg gggagtttga 120
gggtaaaagg atcaagattt actacagttg cttcacaact gcatacttgg tccagaaatg 180
aagatcagga tgatgcactc tcatgaagca tcaacttgag ctcaaattgg gcagggctta 240
gtcattaggt catatgatga tgctgtaaaa agatcatgct aaatggaaaa accaaaatag 300
cacttgcttc acaaacatca tttctgtcca gaaacttgga ataattatgg tgggtcaaag 360
gatcaatgaa atgatgccaa aatgggtgga gagatgttt 399

<210> 1093
<211> 391
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-024-Q1-E1-G2
<400> 1093

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ataggcaagt ccaaacggac acggatagga cgttcgatat ccaccctctt tataaaggga 120
cgaggccttt tatttttccc tcccgtgctc aatcgaatcc ttccccacc tcaagctcaa 180
atgcccaaag ttcaggtcag gtgctccgaa ccttcagtca tgtccggatc tagccttcaa 240
ggccgatggg tgccttcttc cgtcacggaa gaagtcgtca aaacgttgag ggaggccaga 300
tatctgaccg ccgagattct gcacgactg cctccccggg ggcattgcat cncctcctcc 360
gaaccaacg agagcgtcgt gttcgtctcc c 391

<210> 1094
 <211> 301
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-024-Q1-E1-G3

<400> 1094

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 ncctcccagg tgttcttgcg cttgacgagg cgtaggttga ttcggtttca cctatcagct 120
 tgctgcgtgc ctttttgttt gggatctcat ctcggtgtaa cgctgcaacg ttatatgtcc 180
 caagtaaact ttgagatagg cttgtcgcca atttttgcta ttaggtgagt cgtgaataat 240
 tatgaacttc ctctgtgcga gtgaagtgag gtgactggaa tttaacgtac ccctgtggat 300
 g 301

<210> 1095
 <211> 387
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-G5

<400> 1095

gtacagggtca ggaattcccg ggtcgacggg aggaggaccc cgactcggat gacggctgct 60
 gaaagatcac gcattcttc ggccacaga gcggctccgc ttatggctta tccaagggtg 120
 gagcttcacc ggcgccatgg ttgtgctcgg aggaggactg ccgatgctcg ccgctgctgt 180
 cgccacatg ctctctctca cgaccacggg tggacgttgg ctgaggtcta gcctcccatc 240
 cacgcgcaga ttatgcaaga atctgcttgg tctgcatatt agtaccgact agcgagcaca 300
 ggaaggacga cttggacctg acgacttga cgttggctga ggtctagcct cccatattgca 360
 tatttgacca gtactacgcg cggcccg 387

<210> 1096
 <211> 383
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-G6

<400> 1096

ttccccgggtc gacgggggaca acatcaacaa caagctgcag cttgtcatga agagcggcaa 60

gtacacgctc ggctacaaga ccgtcctcag gaccctcagg aactccaagg caaagcttgt 120

gacacctgct aacaactgcc ctccgctccg caagtctgag attgagtact atgctatggt 180

ggcgaagatc actgtccacc actaccatgg aaacaatggt gatttgggaa ctgcgtgtgg 240

taaatacttc cgagtctgct gcctgagtat catcgaccct ggcgattccg acatcatcaa 300

cgcaacacca gctggccagt aaacctgtgt atgccatttt cagtgtctcg tctgatgcgt 360

catctaaggt ggttctagag tgt 383

<210> 1097

<211> 190

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-G7

<400> 1097

ccccgggtcga cggggggacgc gatgtttacc caggtttggg ccctctctat ggaggtaata 60

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gagatcataa tggctaatacc ctagaagtct agcctatgtg ggtatggtaa tgagtacatg 180

tggtgtcctt 190

<210> 1098

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-024-Q1-E1-G8

<400> 1098

tccccgggtcg acggggcgata gaggaaaagc tgaggaggtt taggttgacg gagatcagtc 60

agcagctgcg taggatggac ctgatgaagg agacggtgag gatggtgctc gatgcccttg 120

agagtgcctga ctgaataatg gctgatcgat agtgattggt aaactggttg aagggggaaa 180

tcagtctttt tgtttctaga tagactatat gtggttaatt acttacttcc ctggacaagg 240

ttgcagttgc ctccatcaaa attaggcata gaacatggag tgatgggtctt ctccttggtta 300

ttgttcacgg atcattgtat ttggggattc ttaggtgcta acttgtggtt tatatgctat 360
 ttggttgtgt c 371

<210> 1099
 <211> 324
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-024-Q1-E1-H1
 <400> 1099

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 agctggcgct aaagcatcgc cagaataaga tgcaacagca gagaattatt gttttcattg 120
 gaagccctgt gacatacgac aagaaggtct tggagacaat aggaagaag ctgaagaaga 180
 ataatgttgc ccttgacgtt gttgattttg gtgaaactga tgatgaaaag cctgagaaac 240
 tggaagcgct gatcgctgct gtgaacagca gtgatagcag cccacatcgt catgtcnctc 300
 cggggtgaca tgccctttct gatg 324

<210> 1100
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-H1
 <400> 1100

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 catgaggtgt tctttgattg tcttccttat gagtggcggc cggggacgag cgatggtcct 120
 ttctaccaa tctatcccc taggatcatg cacgtagtgc ttggtttttg atggcttgta 180
 gatttttgca ataagtatgt gagttcttta tgactaatgt tgagtccatg gattatacgc 240
 actctcacct ttccatcacc gctagcctct tcggtaccgt gcattgccct ttctcacatt 300
 gagagttggt gcaaacttca ccggtgcac caaaccccgat gatatgatac gctctttcac 360
 acataaacct ccttatatct tctcaaac 390

<210> 1101
 <211> 137

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-024-Q1-E1-H5
 <400> 1101

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 tcgtctccga tcgactcgag gcttgtcgaa tctctcttca ccaccgcctc aagatgcaga 120
 tctttgtgaa gacactg 137

<210> 1102
 <211> 344
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-A2
 <400> 1102

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 ctattgctgg tgttgttggt gttgttggtt ctgctgctgc tgctgttggt gttgttggtt 120
 ttgctgttga tgttgcgtgt gccgttggtt ttgttgttgt tgctgttggt gttgctgttg 180
 ttgttgttga tgttgttggt gatgtcggtt ttgcagtagt tgttgttggt gttgttggtt 240
 ttgttgttga tgttgatggt attgttggtt ctgctgcagt tagctgctga tgttgctgac 300
 tgatgttgct gttgttgctg tagaagttgt tattgctggt tggt 344

<210> 1103
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-A4
 <400> 1103

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 ccccaagatt gcgcagttcg ctgagcggaa tccggacgtg ctgttctgc aagtcaacta 120
 cgagaagcac aagtccatgt gctacagcct ccatgtccat gtctccctt tcttcaggtt 180
 ctacagggga gccagggca gggtcagcag cttcagctgc acaaatgcaa ccatcaagaa 240
 gttcaaggac gccctcgcaa agcactcgcc ggacaggtgc agcctcggcc cggcgcgggg 300

gctcaggag gcgagctct tggccctggc ggcaaacagg gacctggaat tcacctacaa 360
cgagaagccg acgctggtgc cgatcgccga ggctat 396

<210> 1104
<211> 370
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-A5

<400> 1104

ttcccgggcc gacgggatta tggttgtaga aatTTTTatc ttattaaatt acctctcgtc 60
atgttgagat tgctatcgtc tctttcttct tccttgcata tgcttgTTTT tgcttgccctt 120
gcaaatttgt ttgattataa tatgcctatg cataggaagt atgttagaat tagatgtggt 180
tgtcctgtgt ttcattgatgc tctctttgtg cttcaatttt tgccttcat gtgagcatca 240
ttaaaattat caatgcctag ctaggggctg taaacgatag cgcttggttg gacgcaaccc 300
aatattttcc cttgctgtta ttaataaat cttgctgcta ccttatgttt aaatgttttt 360
ttatctttta 370

<210> 1105
<211> 435
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-025-Q1-E1-A8

<400> 1105

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cgcgcgcata ggaggcgaat cagcagcgga accaagccgc cgacgccacc atgggtatct 120
cgcgtgactc catgcacaag cgccgggcca ccggtgggaa gcagaaggct tggaggaaga 180
agcgaaagta tgagctcggc cgccagccag ccaactactaa gctttcaagc aacaagacag 240
tgaggagggt ccgtgttcgc ggaggtaacg tgaagtggag ggctctccgt cttgacactg 300
gtaacttctc atggggtagt gaggctgtga cccgcaagac ccgtctcctg gatgtgggtt 360
acaattcgtc aaacaatgag cttgtgagga ctnagacct tgtcaagaat gcattgtgca 420

ggttgatgct gcccc

435

<210> 1106
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-B4

<400> 1106

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attggctctg aattgagggg cggagcgggt gtcgggtgcg tctcctggac actgtccgat 120
ggtagagcta aatcatgctc atcgtgaccg tgcgggcgac tcggcagggg ctggaatccg 180
tcgaagatga agtctccggt gatgtccgac gtgtagttaa agcttccaaa cctaacctgg 240
tggccagggg cgtaactctc gatctgctcc agatggccaa gcgagttggc ccgcagtgcg 300
aagccgccga atacaaagat ctgtccaggg agaaaagtct caccctggac tgcacgcta 360
tcgatgatca aaggagccat caagccta at ggtgacgaca cagaggaact ct 412

<210> 1107
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-B5

<400> 1107

aattcccggg tcgacgggtt ctgaaacctg ggatgcgcaa ggaagctgac gagcgggagg 60
ccctcacggg ccgcaccgct ggccgacct gatcttctgt gaagggttcg agttggagca 120
cgctgtcgg gacccgaaag atggcctccg cctcctccgg gatgctgcac gacgtggctc 180
ccctccctcg tctgtgctg ccgccgacct tgtcacgtcc tttgtggcca tcggcaactt 240
cgcaaagggtg tctgagacgc tccacctcat gatctctgcg ggatgtcctc cagctacgtt 300
tgtctaccag cgagatcaag ctgcgtgggt atgccataga tgtagtcact tacagcac 358

<210> 1108
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-B6

<400> 1108

aattcccgagg cgcacgggga agaaacccaa ggcggagaag cgggcgccgg cgaccaagga 60
ggccggcgccg gaggggaaga cgaggggcag gaagaagggc agcaaggcca agaagggcgt 120
ggagacgtac aagatctaca tcttcaaggt gctcaagcag gtgcacccgg acatcggcgt 180
ctctccaag gccatgtcca tcatgaactc cttcatcaac gacatcttcg agaagctcgc 240
cggggagtcg gccaaagctcg cccgctacaa caagaagccc accatcacgt cccgggagat 300
ccagacctcc gtccgctcgt tctccccgg cgagctcgcc aagcacgccg tctctgaggg 360
caccaaggcc gtcaccaagt tcacctcatc 390

<210> 1109

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-B8

<400> 1109

ggtaccgagt caggaattcc cgggccgacg ggttacgtag ggaagcaccg cctctccgcc 60
gccatccagc gcctcgacca ggagctccag tactccagg atgaattgaa tgagcttgaa 120
accatggaac ctgcatctgc ggcagtcgag gagtgatca caagtactga aggaaagcct 180
gacccgcttc ttccaatcac aagtagcccg gagaactctt cctgggacag gtggttccag 240
cgcgtgcgaa gctcccgag caacaaatgg tggcaatcca aaggctccga tttgcctag 300
ctttcgccga agctgagaca agctgtgtgc agattgaatc tcccctgacg cgtatgggtc 360
atccatggat ggcttggaac cagaatacaa cccagttttt cctgagaatt gttgtgtatg 420
taatccctaa c 431

<210> 1110

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-C2

<400> 1110

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 aacgatggtc gcgccggcct ctgtgagtca tggtcggcaa cgggagtcag ttcattgtcc 120
 acgacggtgg tactttctgcy cttggcatcg gctttcgaga agcagatcga agaccgtgga 180
 agacgatgcc ggggaagagg ctctgtgtac gacgacgatg gtggaccggc tccagtgcgg 240
 cgtacgaggt cgtcgatgag gcagatgcgc tgcggtggac gagtgcgccg atgtaaaggg 300
 gaggagcacg aaggctgcgg tgccgtggag aagtctatct tgcggtgggg atagaaaatg 360
 gggagtattc aggtgtacta ctctgggtgc cgggggtggg gttggttggg tagggtgaaa 420
 cctgaagtta cgaaaacagc ccccta 446

<210> 1111
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-C5
 <400> 1111

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 cacagctgcy ggtggttata tgggtggcgg agtacacgag tgggttccga tgtcaggata 120
 accaccgtcc atagctctca tgtgaatgtg gcaaggccac aaaacaagtt ttccatcgcc 180
 agatatccaa cagatcaact ggtggtatgg atgcgtctta aagatatttt tttgtcattt 240
 caaacatcaa acaccaacta ttcacaatgg agacacagcc gcttcacttc tcccaggtaa 300
 aggaaagggt cgcctatggc tccgtcgag cccaagtcgg gcctcttcgt gggcatcaac 360
 aagggccacg tcgtcaccaa gcgcgagctg ccgccgcgcc cg 402

<210> 1112
 <211> 391
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-C6
 <400> 1112

ccaggtagca gtcaggaatt cccgggccga cgtgttaatt gtcgtgattt gccgattggt 60
 actctatatg tttgccaat aagctgtgca ccgtgtgcac ctttggaaca gtgaagtagt 120

aattattttg tgaaaaaaaa aaaaaaagaa aaaaaaaaaa aaaaaaaaaa aaaaaaaacc 180
ggccgccc aaaggatcaaa cctaacttac cttgaaggc aactccaaac ccctccaaaa 240
gggccaccaa aatccaatcc acggggccgcc gtttaaaaac gccgtaacgg gaaaaacccg 300
gccgtaacca aactaaaccg cctggaacaa aacccccctt ccgcaaccgg gcgtaaaacc 360
aaaaaggccc gaaccgattg cccttccaaa a 391

<210> 1113
<211> 447
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-025-Q1-E1-D4

<400> 1113

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gagctgcacg agcacgagct cttgctgac cgccgcccc ggccgtacgg ctgcgacggg 120
tgcaagaga tgggcacctc ctggtcctac aactgcgcgg agtgtgactt cgatctgcac 180
accaagtgcg cgctgggtga ggagaagaag ggagaggagg tgaaggggca ggaggatgct 240
gctgccccag ctgggtacgt gtgcgaggga gacgtctgca ggaaggccta ggtagcgttg 300
tgttgtgtgt gttcctttcc agctgaagcg tgtctgaatc atgtgctgtg tgggtgtgatg 360
ataaataaat cttgcatccg atggtttggc ttgggaagta gtatttgcg tggtgacatt 420
catgtgcaaa gtcgtctgag tatatgg 447

<210> 1114
<211> 383
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-D5

<400> 1114

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ggatgagtgt atgcgcgtgt atatgagcgc ttgtgtctgt actgatgctt aaaaaatca 120
tttgctggc cagtcgttga tttcaaacac cacaatctga ttagagccgc atgatcgcgt 180
cctaacatgt tcagagtccc cctcacccaa aaaaaaaca tggtcagagt cccccgtagc 240

aattccaacc agcaggaatg cttgccaact tgcaccagcc atgcagcacc tcgtcgctgg 300
tcagctcaga ttaaaaatcc gacgagcacg ccacacatcg gccacggctg cagggccgaa 360
gagctcagag tttcaacacc ggg 383

<210> 1115
<211> 431
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-D6

<400> 1115

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ctcgctgct gtgcaggatt cggaccgtgc ctcttgggc tcttgaaggg ccttggcgag 120
ttcggtccct ttgccttat gttcttcttc taaggactca cacttgcggg tgggtgcctt 180
gagcttctgc tccacctcg tccaccgttc ctcaaacgg cggcgagcgg cctgttcggc 240
cgttatgtcc gcagccgctt tatcagtac ggccttgctt accctcgctt gtccttggc 300
ttgtgtaagc tcaccctga ggggtctaac cacggcgga ccatctgtac aaacacacat 360
attgcggctc ttgaaatttc gcagcacacg gacataaaca tgcattaat aagatgtgtc 420
ttgtaccttg c 431

<210> 1116
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-D7

<400> 1116

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cgttgtcagc aagaacgccg acgagatgaa ggctgcgatg agcaccatgg atggcatcat 120
aaacacggtg tctgcaaaca tccccatggc ccctctcttc gggctactca agcccaacgg 180
caagatggtc atggtcggcc tcccagagaa gcctatcgag gtccctccct ttgctctggt 240
tgccaagaac aagaccctgg ccgggagctt catcggcggc atgagggaca cccaggagat 300
gctggacctc gcggcggagc atggtgtgac ggtagacatc gaggtgatcg gcgccgagta 360

cgatgaacacg ggcattggagc gccttgccaa a

391

<210> 1117

<211> 384

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-D8

<400> 1117

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ctcgcggagg acaagcactt gcccatgtac gatgagttgt ccagcaagga aaatggtgaa 120
tacattgctg gaggagccac gcagaactct atcaggggtg cccaatggat gcttcaaact 180
cctggtgcaa caagttacat ggggttgcat ggaaaggaca agtatggtga ggagatgaag 240
agcgccgcta aagctgcagg agttactgct cactactatg aggatgaggc tgctcctaca 300
ggcacatgtg ctgtatgtgt tgttggtggc gaaaggatcat tgattgcaaa cttatctgct 360
gcgaactgct acaaactctga gcat 384

<210> 1118

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-E10

<400> 1118

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gaacaagttc ttgaaggagg aggttgggc ccaaccatc catgtaccat caggggagaa 120
gcttgctggt tttgatgctg ctatgaaata caagaacgaa gggcatgaca ctatcatcct 180
ggctggtgct gagtatggca gtggaagctc aagggttgg gctgcgaagg gtccaatgct 240
tcaggagtg aaggctgtga tagccaagag ttttgagagg attcaccgta gcaatctcgc 300
tggaatgggc atcgctccctc tatgcttcaa ggctggggag gatgccgaca ctcttggtt 360
aacaagccat gagcgctaca ccatccagct tccgactgat gtgaatg 407

<210> 1119

<211> 409

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-E3
 <400> 1119
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 gaaatagcag ttcggcttcc gttgcccata tcatatactc gttaaaacta taccacacat 180
 atataactac gcacttaaga taccatgggc attggcggaa gcgtaatacg gacaagtctg 240
 caagcactcc ggtaacattt ttttctactt tcctttttct ttcttcatta cctcttaaaa 300
 acagggtggcg caaaggagaa acatctaaaa ccgactctat cggagttag atctgtacac 360
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<210> 1120
 <211> 370
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-E5
 <400> 1120
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 tagtaggtga ctatagactt gcaagatagg atcaagaact cacatatatt catgaaaaca 180
 taatagggtc agatctgaaa tcatgtcact ctggccctag tgataagcat taagcatagc 240
 aaagtcatag caacatcaat ctgagaacat agtggatact agggatcaaa ccctaacaaa 300
 actaactcga ttacatgata aatctcatcc aacctatcac tgtccagcaa gcctacgatg 360
 gaattactca 370

<210> 1121
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-E7
 <400> 1121

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 tgcgtacgtc cttatacat cactactagg tgcttatgtt acttcgttct gtccggttat 120
 tagcactcat gtttactttc gcactgagaa ctgaaaaact gaatgtaaat ttagtatgga 180
 tgccgtgtat gtggaccttg tgttgtaatt ccgtttaaag cactaggcga aaaacaaaaa 240
 aaatatatat tatgcatgta atcctcgagc attgactatt aatgtcttct gttagctata 300
 aaaaaaaaaa aagaaagaaa aaaaaaagcg gccgctcgag aagatccaag gcttagttag 360
 gcgttcaagg gaagttaaaa gttcgtcaat agtgtaaca aaaa 404

<210> 1122
 <211> 323
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-F10
 <400> 1122

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 acgtatggta ccattaatta accaagcatg tggtgattgc attatttttt ggcccctgat 120
 tggatctcat agtacttatg atacataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aagcggccgc caaaagggtt caaagcttac ttaccctga atgcaacttc aaagcccttc 300
 aaaagggtca caaaattca att 323

<210> 1123
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-F2
 <400> 1123

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 tggaatgagc agtcagttag tcaaggcaat gccgagtctt atttttataa aagtccagga 120
 agacaattgt acttcgtcaa catgtgccat ttgcttgga gactacagtg ttggtgaaaa 180
 gataaggggtg ctgccttgtc gtcacaagtt ccatgctgct tgcgtggacc tgtggctcac 240

atcatggagg acattctgcc ctgtatgcaa gcgagatgca aatgctggaa tgtcaaattt 300
 ccctccatca gagtctaccc ctttgctttc ttctgctatt cccttgccag ctgaatcgac 360
 agctttgtct tcttttcggt caatggtagc agcatctcct ccaaggacaa taaccggga 420
 tccttc 426

<210> 1124
 <211> 351
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-F3
 <400> 1124

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 atggttatca ctaaggccgt gattctgggt cactacaaat ctgcgtccg atacctgatc 120
 atctaatttg tgagttcaga atgctcatgg agaagttcct cgatgtgtac tactcgtact 180
 gcctcacgca tacaactcgc atcctcgtaa cgctctaaa tgcctgggtg ctccataagt 240
 agcatcctct gtggggcctc accatctgac tggacgtgtt cgtcgtccta aagaacacac 300
 tggacgacgg gttggcaatg tcaccgtgca cggagctggt caacgacacc g 351

<210> 1125
 <211> 356
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-F5
 <400> 1125

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 ccagcccatc aaggagtctg ctctggggaa catcctacc attgccttct gtgacactga 180
 ctctcccatg agatacgtcg atatcgcat ccagcaaac aacaagggga ggaacagcat 240
 tggctgtctg tactggctct tggccaggat ggttctgcag atgaggggca ctatcctgcc 300
 agggcacaag tgggatgtca tggttgatct gttcttctac agggaccctg aggaag 356

<210> 1126
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-F6

<400> 1126

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 tcattgctgc ctatctgctt gcttacctct ctggcaacgc cagcccctct gcagaggacc 180
 tgacatccat tcttgagtct gttggttggt aaatcgacaa tgagaagatg gaactcatgc 240
 tgtcccaagt gaagggcaag gacatcaccg agctcttggc tgctggtagg gagaagtttg 300
 ctgcggttcc atctggtggt ggtggtgtgg ccgtttcagc tgctgcccct gctgctggag 360
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<210> 1127
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-F7

<400> 1127

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 aggtttatta aacacagaag aagaaagcaa gaaaaagaaa ctaaactagc atggatatta 180
 cagtgaagaa gtatgagcac cgacatctaa caatgagtgt gtgaacataa atgtaatgtc 240
 ggtgggaaat acgtactccc ccaagcttag gcttgaggcc taaggatggt tattgccacg 300
 gatggcctgg cggatatcca tagttgtagt tggggtcgta ctgagatgca gtggtcattg 360
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 ct 422

<210> 1128
 <211> 441

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-025-Q1-E1-G1
 <400> 1128
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 cttgtcttct tgctccagcc gcccaaagta gcgccggtcg tgccgcatgc tcttgccctcc 180
 cgtggccggc tgtgtgtgccg cggaggcctc accgccccta ctattccac tgctggctag 240
 gccctgcggc gacgacagcc tcaaaccgta gccgaacaa tgaaccctcg tactcctctc 300
 cacgcggtct tccactgccg ggccttcccc ggctccggt cggtcccttc ctaggcctcg 360
 ccgtcgtcca ccgccgtggg tgctctccgc gtgggctggc caaatgggtc aaggaacaac 420
 ttcaaccgga aaagtactac a 441

<210> 1129
 <211> 404
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-025-Q1-E1-G3
 <400> 1129
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 aaacggactc cgaatttgat gaaaccaagt ttgttgaaa gctagcgaca agggctaaca 120
 aaatattgaa agaaatatca ataagaagca aaatataaaa gtcccataag aaaaagggtga 180
 gaacccttcc tcggaaaaga ccggtaaaac ctgcaacacc gaaaacatca tagaagacgc 240
 atgcgaactc cgttttcgat gaactcaagc ttgtcatcaa gatgaccata agctctaaga 300
 ctacaaaaga taaccaaaca agaaccaaga aacatgatgc aaggatgcaa tggtttgagc 360
 tctctactac cgacacgatc gagctaaca acttagagcc cccc 404

<210> 1130
 <211> 443
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-025-Q1-E1-G4

<400> 1130

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ccaggacgcc cagggcgcca ccatctttca tggtgctgct tcaagggggc caagttgagg 180
attgctgcta taagttgggtc ttatgaacat tcaacatgcc atccagggtg taattctgct 240
tgtaccctcc ccttcttctt acatctcaat tccctctccc atgcttcttt tctctaagag 300
ctctctcttt cttcaatttt ttctgcagag agatggccat ggttgcccga tgcccgagcg 360
tcgcccggcca aggaccggtc ggcgtctaga ccctccacg ccatcccatc tcgccaaaga 420
cctgcaccaa gtcccgtcca gag 443

<210> 1131

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-G6

<400> 1131

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gtacgcgatg atgtccatat tcctaaactg aaattgaata ttccaccatt tgagggtaga 120
tatgttcctg atatatatgt tacttgggag ttagaaactg aacaacgatt tacatgttta 180
caatatcctg aggagagacg agttgctgct gctgtttgtg ctttcactag ttttgcttgt 240
gtatgggtgg ctgaacattg tagattatat cctattccaa ctacttgggc tgctttgaaa 300
actgctatgc gtacgcgttg ggttccacca tattatcaac gtgaattgct tcaaaaattg 360
tagcgtttaa gacaaggga aaattttgta ggaagaatat tatcaggaat tacagactgg 420
catgattaga tgtggta 437

<210> 1132

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-025-Q1-E1-G9

<400> 1132

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aagagcgtag ctggcaggac cttcatactg cttcggaggc atgccgtctt tttcgtgcaa 120
acgttgacagg tcttcccgtg cctcagggtg atcttttctg ttcccataca cgccaagaa 180
gcctagcagg ttacgcgaaa ggttcttcgt cacgtgcacg atgtcgattg aagagcggac 240
atctagggtc ttccagtagg gtaggtccca aaataaagat ttcttcttcc acatgggtgc 300
gtgtccctca gcgtcattcg gaacaggtag tccgccggga ccctttccaa agattacgtg 360
taaatacattg accatagcaa gtacgtgatc accggtaccc atggcgggat tcttccggtg 420
atctgcctcg c 431

<210> 1133
<211> 372
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-025-Q1-E1-H2
<400> 1133

actttcaatc catctttggt accaggatgg attggccttt gtgtactcgg tgattgtgat 60
gctgctgatg ttgttgttgt tattgttgtt gttgttgttg ttgttgttgt tggttgttgt 120
gttgttgttg ttgttgttgt tggttgttgt gttgttgttg ttgttgttgt tggttgttgt 180
gttgttgttg ttgttgttgt tggttgttgt gttgttgttg ttgttgttgt tggttgttgt 240
gttgttgttg ttgttgttgt tggttgttgt gttgttgttg ttgttgttgt tggttgttgt 300
gctgtagttg ttgttgtagt tggttgttgt gttgttgttg ttgttgttgt tggttgttgt 360
gttgttgtgt gt 372

<210> 1134
<211> 411
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-025-Q1-E1-H5
<400> 1134

aggtacctat caggaattcc cgggtcgacg ggtaccaccc cctcttccaa gatgtcgaag 60
cgagggcgcg gaggttctgc tggttaacaag ttccggatgt cgctgggtct gccgggtggca 120

gccactgtca actgtgctga caacactggt gccagaacc tgtacatcat ctccgtgaag 180
 ggaatcaagg ggcgcctcaa caggcttctt tctgcctgcg ttggtgacat gggttatggcc 240
 actgtcaaga agggaaagcc tgacctcagg aagaaggcca tgccggctgt catcgtcagg 300
 cagcgcaagc cgtggcgccg aaaggacggt gtcttcatgt actttgaaga caatgctgga 360
 gtcattgtga acccaaaagg agagatgaaa ggttctgcca tcaactggacc g 411

<210> 1135
 <211> 374
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-025-Q1-E1-H7
 <400> 1135

aattcccggg ccgacggggg gagtcatgtt catccaacct cagtctgctc gatggatcag 60
 agtcatgtac atcaaggagg taatcatcat ctgggttccc tggttcattc cactcccga 120
 tctgggtaag tatgtccagt ccacgtccca cctgactaac tcatcacatg ttcattccata 180
 ggcatcatca attggtttca gttaccagca gtagtgaagg aattgctcga tcgggttcag 240
 ttaacagcca ttgatcgatc gctcgggttc agtaacgcgt agcctgcagt gcaatcgctt 300
 ggggttcagtt acagcccaat gcctcgctcg gggttcagta gagccaactc ctcgcacaca 360
 cgcgcgatg tgta 374

<210> 1136
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-026-Q1-E1-A1
 <400> 1136

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 atgttgata taaagatcgt ttgggtaaga agtataacgg aaagaaacta tatgcttggt 120
 tgtttaagaa gtgttgata cttgtgtgag ttgacgagac acatcaaagt agtactgtac 180
 tactactagt agtactccct ccgatacctaa tttctctgag cataagtcga ggtgcagata 240

ccaaggaggt cttgcttggtg tctatacttg gacaactcat ccaactgcg actangcaga 300
cgaagctcgt gtcgtgttg tgccgtgtgt ctccatctta gcctccgtgt tttagacttc 360
tcaatctcaa ggccaaggag caacatgaaa cctatgatag agcaaacgg atggttttaga 420
acactacaat 430

<210> 1137
<211> 374
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-026-Q1-E1-A10
<400> 1137

gtaccgatct agaattcgcg ggtcgacggg catagaaagt accaagacgg aagatgtcat 60
ggcgggcata gaaggtacca agacggaaga tgtcatggcg ggcatagaag gtaccaagac 120
gggagatgtc atggcgggca tagaaggtag caagacggca catgtcatgg cgggcataga 180
aggtaccaag acggaagatg tcatggcggg catagaagg accaagacgg aagatgtcat 240
ggcgggcata gaaggtacca agacggaaga tgacatggcg gacatagaag gtaccaagac 300
ggagaatcca agcgacgaat aaatcagtgc atgaacggag agtagatatg gcgccacttc 360
tttgggtggcc ctga 374

<210> 1138
<211> 406
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-026-Q1-E1-A11
<400> 1138

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ctgtgcagag cactccttcc acagctactg ccaatgcata ccattacagc ctatctcctt 120
gctatgcttc ctggacccat tacatgctta acaagaatgc atatagctac taccctgcac 180
ctaatacagga gcacaccac cctttcagcc ttgataacaa ccaggctaaa gatccagggt 240
ctatacccag ctttgggatt gagtcattta atacaacatc cctggcacca aacatgtctg 300
ctcatatgcc tcccatggaa ggaccctac ctacaaagga acctgagggt ccagaggaca 360

tgccctgctag agtagctaca attaatgatt aaatggatgc caaaaa

406

<210> 1139
<211> 294
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-A12

<400> 1139

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gccgggtggc cctgtcagtt gatgggtcat tcctgaagga ggatgggtct gcagctgtcg 120
gtatggtgct tataaacgac aaaggagatg ttcaaagga agcctaccgc ttcattcttct 180
actgcaatga cccgctggaa gcagaattac atgcgatcat gcagtgtttg gccctatcaa 240
tacaacactc tgatttacgg gtggtggttc aatcggactc ggctgaagct ttgt 294

<210> 1140
<211> 388
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-026-Q1-E1-A2

<400> 1140

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tgcgttttac atctagcact ttttggtgat gtattttaca tcatctattg cagttgatat 120
tanggtccca cttcagatta acgttgtctg tcttgatcgt cttcagcctc gtcgccgtac 180
accttagcgg agctgctcca acgacggaac cgtccatcac agcggagcag taccctcggc 240
gccgtttcca gaggcctcgg atcttcttcc ccgcctccga cagtcacacc agcatcatca 300
ccatcctcca cgtccaaccc aatgatgctg aggtgcacaa ggctatgccca aagaggttgt 360
acactcgtcg catcactttg tttctcca 388

<210> 1141
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-A4

<400> 1141

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gcgtccagcc gaacgtgacc atctacatca ataacctcaa cgagaagatc aaactcgaag 120
cacttatgaa gtccctcaat gccgttttct ccagtttgg gaaaatcatt gaggtgcttg 180
ctttcaagac tttgaagcat aaagggcagg catgggttgt gttcgaagat gttgcatcag 240
caactgaggg tttgaagagg atgcaagatt ttcccttcta tgacaaaccc atgaaaattc 300
aatatgccaa gaccaagtca gatgtttag caaaagctga tggcactttc gtacctcgag 360
aaaaaaggaa gaggaatgat gagaaacctg agaagaagca gaagcgtgag cagcaccatg 420
atggtt 425

<210> 1142

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-A6

<400> 1142

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tacagtatgt ttaacaccaa tataaataaa gaatgagttc attatagtac tttatgtggt 120
tatttttctt tctttcacta acggagctta tgagatttcc tattgagttt tgtgttggtga 180
agttttcaag ttttgggtaa agatttgatg gactatggaa taaggagtgg caagagccta 240
agcttgggga tgcccatggc accccaagat attcaataat ggccaaaagc ctacgcttgg 300
ggatgcctcg ggaaggcatc ccctcttctg tcttcgttca ttggtaactt tacttgagac 360
tatattttta ttcgccacat gatatgtgtt tcgcttggag catcttgcac gatattagta 420
tttgcttttt agtttaacac aatcat 446

<210> 1143

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-A7

<400> 1143

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 ggtcgggtcg ctacaagatg gtatcagagc acacactgag tgtaggacac gaccactaag 120
 ctacaacat cgatcactat tctcttctca ttttgactc ctctccattt tctactcttt 180
 aggaaggtgg atgcaaggaa caagtttaca caaccggagg aagaatcacc ttttggacga 240
 cacctgaaag aagtcactag gtacctgaac attggaatgc caagcttcac cgggacttac 300
 aatgccacat taccaaaaga ggagcgatgg atgattcaag ttcaagttcc aggaaggacc 360
 ttcacggcag tcaactaaacc catagagttt tccttcgatg cac 403

<210> 1144
 <211> 418
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-A8
 <400> 1144

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 agaagggcgt ggagacgtac aagatctaca ttttcaaggt gctgaagcag gtgcaccccg 120
 acatcggcac ctctccaag gccatgtcca tcatgaactc cttcatcaac gacatctttg 180
 agaagctcgc cggcgagtcg gccaaagctcg cgaggtacaa caagaagccc accatcacct 240
 ctaggagat ccagacctcc gtccgctcgc tctccccgg cgagctcgcc aagcacgctg 300
 tctccgaggg caccaaggcc gtcaccaagt tcacatctc ctagactgac gacgcgccgc 360
 ttgttgtgac agatgtagtt ggctgctgtt agtcgctgac tctgcttatg tatctgca 418

<210> 1145
 <211> 380
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-B10
 <400> 1145

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 ctctccaccc caagattgcy cagttcgctg agcggaatcc ggacgtgctg ttcctgcaag 120
 tcaactacga gaagcacaag tccatgtgct acagcctcca tgatgatgct ctcctttct 180

tcaggttcta caggggagcc cagggcaggg tcagcagctt cagctgcaca aatgcaacca 240
tcaagaagtt caaggacgcc ctcgcaaagc actcgccgga cacgtgcagc ctcgccccgg 300
cgcgggggct cgaggaggcg gagctcttgg ctctggcggc aaacagggaac ctggaattca 360
cctacaacga gaagccgacg 380

<210> 1146
<211> 377
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-026-Q1-E1-B11
<400> 1146

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agcatgcgcg tagttcttgg tttttgatga cttgtagatt tttgcaataa gtatgtgagt 120
tctttatgac taatgttgag tccatggatt atacgcactc tcacccttcc atcattgcta 180
gcctcttcgg taccgtgcat tgcccttact cacattgaga gttgggtgcaa acttcgccgg 240
tgcacccaaa ccccgatgata tgatagctc tttcacacat aaacctcctt atatcttctt 300
caaacagcc accataccaa cctattatgg catttccata gccattccga gatattatgc 360
catgcaactt tccaaca 377

<210> 1147
<211> 417
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-026-Q1-E1-B2
<400> 1147

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ggtaaaggag aagatggggg aaggggaagg aaggcctccc ctctcttggc tctggcctgt 120
gggaggaact ctccgccgcg gggctgctgc tgccggccgg tgtctaccgc ctgatcggaa 180
ctggatggct ggataccggt cttcatatgc taccatgata cggacgtctg aaccgttggg 240
tctcagatcc gacggcatat aaggagttgt tgtacctgca cgcaatttca agattcttctg 300
atgatttttt tgtaaaatgt ttaatagctc ataggagccg tttgatctga tatccaacgt 360

taccaagagc ccgtatcacg gtatcaccta aacgttgga gcacatgata tttcccc 417

<210> 1148

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-B6

<400> 1148

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cgctggagca caacctggag gcgccatgc acaagggtcg ctccgagaag gaccgcaaga 120

tcgggggcga gatgagctac ctcgagaacg tgatcagggg gaaacaagct gagcgctacg 180

gcctatgtga caagctcgct catgctcaga gcctgaaggt cgtggaaggc ggatccacct 240

cgctgaacaa cgggtctggac ctcaaacttg gattcaacta ggaacgggtg aaagcttctg 300

gccgtggggt tctgctctag tgttgctgtt gagctcgagt gttatgtcag gttcaaatat 360

tctgcaattt ccttcgaagg gattgtatga acttgtaaga gaccactgtc ttatgagatg 420

ttt 423

<210> 1149

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-B8

<400> 1149

aggtaccggt caggaattcc cgggtcgacg ggacttctag cgcattcatt cataagcaaa 60

acatgggtgaa ctggaatcta gaactcatcg acataggag acttgatcca catccaacaa 120

atagacacga gctagatttg agaaagtcag tcaaacgaat ctgtaaaatt aagaattcat 180

gcttgctgga tttgtaagca attagttgat ccaccaaacy agaaagagca ttgacagcat 240

taaattgcag aagaaaaact aacagcaacc caaatcacc caaatcactg gttgattagc 300

aacaaacaag acgcgcgtgt gtggtaattc aaagaagaaa cggccctgca gacgacggcg 360

ccgcccata caaggagctg cccgaggagc cgtacatccc cttccttcac aaaaccacat 420

cagacct 427

<210> 1150
 <211> 366
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-B9

<400> 1150

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 aaggggctga tattcataac attcatctcc atcatcataa tcttaacagc aatcgccac 120
 atgacagtcc ttgacatctt cgtctgcac ctcgccttca tgccaactgg atggggcttg 180
 cttctgattg cccaagcgat caagcctgtg gtcgagatgg tcgggctgtg ggggtctgtg 240
 aaggctctcg ccggtggcta cgagattctc atggggctcc tgctgttcac gcccatcgcg 300
 tttctcgcgt ggttccccctt cgtgtccgag ttccagacca ggatgctctt caaccaggcg 360
 ttcagc 366

<210> 1151
 <211> 402
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-C11

<400> 1151

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 cggctcttcg agctcgagac atggcggagg agaatgcccc agttgaggtt gctgctccgg 180
 ttgcggcccc taccacagtt cttggagagc ccatggactt gatgactgct ctgcagcttg 240
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 cgattgagaa gcatgctgct cagatctgtg tgcttgctga ggactgcgac cagcctgatt 360
 acgtgaagct ggtgaaggca ctgtgtgctg agcacaatgt tc 402

<210> 1152
 <211> 412
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-C5

<400> 1152

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gcttatggca cccaagata ttcaaggata gccaaaagcc taagcttggg gatgcctcgg 180
gaaggcatcc cctctttcgt ctctgttcat tggtaacttt acttggagct atatttttat 240
tccccacatg atatgtgttt ttcttggagc gtctgtatt atattagtct ttgcttttta 300
gtttaccaca atcatccttg ttgtacacac cttttgggag aaacctattt gattagaatt 360
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<210> 1153

<211> 431

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-C7

<400> 1153

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atgcacaagt tatccctacc ttgggagggg cctttcgttg tcagcaagaa tctgcacaat 180
gggtcgtact atctgattga tattcaagag cataaagact cacgcacatc agaggaggag 240
accaacaggc cgtggaatat agctcatctt cggccttact acacttgagc catcggtctt 300
atctatgtac atactatggt agtgtatata ttatcattga tataataaaa ccggagcctc 360
agctaaagcg gggctctctgt tctttcatat catgtgtggt tacatggagt gggtccggtt 420
taaagcgggc t 431

<210> 1154

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-C9

<400> 1154

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 ctgagccttt gcataatctt tttaggggtt ttgctttgtt gaatttgagg ttgcatcgtc 120
 gtgtcaagtt gctgggtctta gagtctagtc ttttagagtt tcgagttctg gtcataagtt 180
 gtcacgctgc cgccgcacca tcatcatcgc cttgccatct accaccattg cttatccgcc 240
 accgctttga atccgtatcc atataccacc accaatccgt atccatatac caccaccgat 300
 ccgtatccat ataccactac cgctaccata taccaccacc gctgccatat cctaccgcca 360
 tatatccacc accaatccga gttcctttca tttcggttg gtttt 405

<210> 1155
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 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-D2
 <400> 1155

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 aggcggaatt ctgtagaact gtgtagtgtg cttcagtgag agaatgcccg tccatacata 120
 ttatttgatg cctcctagc gtgccttttc cttccagtct gcccttatgc cgcgattcag 180
 gaacaccaat cggcttaagg ttaggaataa agtcaatata aaactcaatg acttcctcgt 240
 tttcatggcc cttcaagatg cttccttctg gcctagcacg gttatgaaca tatttcttca 300
 agactcccat gaacctttca aagggaaca tattgtgtag aaatacagga cccaaaacgt 360
 taatctcttc gcaaaagtga acta 384

<210> 1156
 <211> 377
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-D9
 <400> 1156

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 gtgcaccgag gagcacagcg tgcagcgccc gacgatgcgg gaggtcgtgc agatcctgag 120
 cgagctccca aagccagctg ccaaccaaga tggagaagaa gagcttctc tctcctgcga 180

aggacctgaa tccaaccctc ctgcctcaac cagttacacc gaggcaccag ccggcgacgc 240
gaaagatcag cagccgcagc agcagcacac aagctcggag tcgtcgctc ctctgatct 300
catcagcatc tgatcatcca agtaccgga agcatcgccg tccgtcgcaa atatgttggg 360
gcttcctttg atcgtgc 377

<210> 1157
<211> 379
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-026-Q1-E1-E1
<400> 1157

aattcacggg ccgacggcgc tagaacggaa gggcaagggtg gtcacggaga tcaaagacgc 60
gattgagcgc cacagcagcg cctatgtctt cacctacaac aacatgagga accagaagct 120
caaggacctc agggaccaac tcaagtcctc tagccggata ttccttgctg gaaagaaggt 180
catgcagata gcattggggc ggtcacctgc tgatgaagct aagacaggcc tgcataaact 240
ctccaagttc cttcaagggtg cttctggatt gttatttaca aatctcccaa gggatgatgt 300
cgagagatta ttccgagaat ttgaggcgaa tgattttgcg aggacaggaa gtattgcgac 360
tcaaacgggt gagctaaag 379

<210> 1158
<211> 403
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-026-Q1-E1-E5
<400> 1158

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cgtcccggga gatccagacc tctgtgcgcc tcgtcctccc cggggagctc gccaaagcacg 120
ccgtctccga gggcaccaag gccgtcacca agttcacctc ctcttagatt gcgtcgctg 180
tatctagtag caaatgcagt tccttcctgt tggtttagtg cttgtctgtg gactctgggt 240
atctgcaagt aatattagtc ctactgttgg atgaaaattg ccgaatcatt gccaatgctt 300
ttttggctcg tcggaaacaa tgttctgtg cgggtctat ctatactgat ttcgcggtg 360

atttataaaaa aaaaaagtaa aaaaaaaaaaaa aaaagcggcc gct 403

<210> 1159
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-E7

<400> 1159

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cgaggacaac gtggtggcgt cctcaacggt gaggattgcy gctattgaag ccctaagtt 180
tggtctacta gggcggggtt ggcagataga gtacactgcc ggagggtgcc gctttggaga 240
tcgttaggta caacatcttt aggtccttgt tcattgagtc ctagggatt ttcgccaccg 300
tatagtgtga atcttttcat tcttatgggt tgcaagtgtc atgcctccg ttagcaatct 360
tgaggccacg aaggcaataa accctaagcc gcaagttccg gatcgggtctg ctgttggc 418

<210> 1160
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-E8

<400> 1160

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cctccagcat aactgagaca acctcgggat tatcacgcta agcagttcag aattccatga 120
gaaatcacca caagttagtt ggccgtgtgc cgtgcatagg cagttcaaaa ataaagatca 180
cacagtcattg tcccgggtttc tctccgtttt cctttcctcg ttggacaccg acattactgc 240
agcaggccct tgaatgtgca agtgctaaac aatgcgacgt ccaatgtaag gtcaaccaag 300
aatggcgaat gggacgcgcc ctgaaagcgg ccaactcaaca gga 343

<210> 1161
<211> 379
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-E9

<400> 1161

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cagccgcttg gccgtgctga agacgaagag cattccagtg actttgagcc agaagaaaat 120
ggtgatggtg ctgaggacga ggagattgag gatgatgatg ctgatgatgg tgaggattct 180
gtcaaggcgc aatcctcttc gaagaggaag aggtctggcg cggaggatga agatgatgat 240
gacggtgatg atgatggtga tgatgatgag aagcctccat caaagcgata gtcaatttgt 300
tcttgctgat ctggtatctt ttctgcttgg gccataacg aaaataatcc tcacggagag 360
ggttggttgg aaatgccgt 379

<210> 1162

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-F2

<400> 1162

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tagaatgtgc agcttagaaa tggatgaaatg gccggagcga tgatgtggag atctttgtaa 120
agaagacaag acaatggaat agtaagaaat agaaaatagg gctactgggtg aaatacatga 180
gctgagaagc cgcaaaatag cgctttgctg gttaaccggg ttaaaatatg ttcccattgc 240
ctgtgggatg gggctgaatg cggagactgg ttgtacttca tagggagtag tgtaagtttc 300
actggtagca cctagctagc tgagatttca caattactaa tattgagttt tgaacatggt 360
gactggatta tattgatttc gtatcttgct aaaagcctaa gatgctaagg ggcaaacttt 420
ttgagggcc 429

<210> 1163

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-F3

<400> 1163

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 ttgccagct tctcagcaac gccagaatcc tgattcactc actatcacca acttgcgtaa 120
 tgcactgaat tttctgtcca tagttgaaga gcttcagagt ttgttcgtac gatatgggtga 180
 gctataacct gcagtcgagg acagttggat gcatgggctg cgtgacaagg tagagctaata 240
 ggtgcctagc aattattcat caccgagcata tttgtaccaa atcatgtcag tcttgaacaa 300
 gttttgtttt tgcagtgtta ttcctgtgat tttccaatcc tatgaaccaa agaaggccta 360
 aacttgctac aaaatctgta ctttcccttt gcgagcgaag gaatacgaac tcctgttttg 420
 caccctatct gcgttggttag cccaaa 446

<210> 1164
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-F9
 <400> 1164

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 aggatagtgt acggcgaact gtctatgtct cagacattga tcaacatgtc actgaacaga 180
 agcttgctga ggttttctca aactgtgggc aagtggtaga ttgccgtatc tgtgggtgatc 240
 caaactcagt gatgcgcttt gcttttatcg agttcgccga tgatgtcggg gcaagagcag 300
 ctctaacgct tgggtggaacc attcttggtt tttatcctgt cagagttctg ccatctaaga 360
 ctgcaatttt gcccgtagac cccaaatttc ctctccaac tgagggcc 408

<210> 1165
 <211> 440
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-G1
 <400> 1165

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 aagggttggt ctctttcatt tgagaaactt ccaaccaaaa ttggaatgtt agaacagaat 120

atttagatac aggtccctta tgaatactgt actgagtaag attcattgaa gaaatgcttc 180
 tccgaagcaa taagtttgtg gcacaagcat agtcttctgc taacctagcc tttcccatct 240
 ttctattaaa acgaatgtag ctaacgtgaa ctaaaagcaa gctcttggtc gaggaagtag 300
 aaattgttag ttgttgctag cttgaactga gttgttctg ttgggtgctag ggttgccaag 360
 ggagtgttag cgagatgctg ctaatgcagc tatttctgat gtccggacga tgcagcggaa 420
 gtgaaaagaa aaaggtatga 440

<210> 1166
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-G7
 <400> 1166

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 gagtcatgct ggtgatcttg gagtgagagc gcggctctca aggctgcact gctacgcgtc 180
 accaccgacc gacagggcac ctcaagtcac gctggtgatc ttggagttag agcgcggtc 240
 tcaaggctgc actgctacgc gtcaccaccg accgacaggg cacctcaaac cattctggtg 300
 atcctggagt gagagcgcgg ctctcaaggc tgactgcta cgcgtcacca ccgaccgaca 360
 gggcgctca aaccattctg gtgatcctgg agtgagagcg cggctctcaa ggctgcactg 420
 ctacgcgtc 429

<210> 1167
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-026-Q1-E1-G9
 <400> 1167

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 ccaaggggct caaaccggcg aagcagatcg acacaataaa gaagctgcag ctccggagcct 120

gagtgaaggc tactaccccg tggagatgtc gaaagttgta atcagctgtc atttggtttg 180
 ttttggctcc gtggtgacga ataatgggtg gaaacgcagg atattccccc cttgacgatt 240
 ccgtgtaggg aatgaataat tgctaccaga ttttattctt ttcgtgctat atctagtttg 300
 gtggttcacg gttgatcaaa ananagaaaa aaaaaaaaaa agcaaaaaaa aaaaaacaaa 360
 aaaaaaaaaa aaagcggccg ctctaaagga ttcaa 395

<210> 1168
 <211> 386
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-026-Q1-E1-H1
 <400> 1168

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 gcaactcaatg cccaggctct ggttcatgcc ggcaagggtga aagagctaga ggtggagcgg 120
 gacgggctga aggatcaggc cctgaagctg gccaaaggaga atgacacgct caacgggtgcc 180
 ctggtggagg cgcagggtgc agtcctcggc aaggctgagc agttctccaa ggccaacgac 240
 cccatcaaag acctgaagct gaagctggag ggtcttgagg agatgctctc ggaggccaat 300
 gcccgggagg agaccctggc caaggatctg gaggtcgaga agcaactgcg gaagaacgaa 360
 gccgccaacc acaaagattt tgtgga 386

<210> 1169
 <211> 374
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-026-Q1-E1-H1
 <400> 1169

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 aacattgagt gcaagcatga gtaggatata atccaccatg gacataaata tcgtgaaggc 120
 tatgttgatt ttgtttcaac tacatgtgtg aacatgtgcc aagttcagtg acttgaatca 180
 ttcaaaggag gataccacc cttcatacca catcacaacc attttaatag catgttggca 240
 cgcaagataa accattataa actcctagct aattaagcat ggcataagca actataatct 300

ctaattgtca ttgcaacag gtttattcat aataggctga atcggaatg ataaactaat 360
catatttaca aaaa 374

<210> 1170
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-H3

<400> 1170

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tactgcgccc cctacttggc gcaccaaaga tgtcgggtgga aacggaact atgggatcac 120
aagaatccct actacggttg cggggcgcgg ggtcatgaga agagcaggat caacagtcaa 180
cacaagcact cgggtcggtt acccaggttc aggccgagag gatgcgtaac accctagtcc 240
tgctttggta tgtatatctg tgttcttgga gttcttgagc tagctacaat gagtgttaact 300
tgtccaaggg tctgaatcct tctcttggtg gccttggggc tccttttgta gtcaagggga 360
tcgccacagt ggcacacatg aggtggcatc ggtgtacggt ggctaagctt atcgtttggc 420
attacgggac aagacacatt t 441

<210> 1171
<211> 356
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-H4

<400> 1171

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cgcggtagat gggttcgtgc caaagccaca ctgaagacat ccatcacttt tgtaccttag 120
catcatcacg taacttcgct actgtaacgt ctctgaaagc ccccggtgtc tcggacttgg 180
atctgtcctc agcttatgat ctcttggtc agtgcaagat catcagtagt tactagaact 240
ggcagtgcgt gaatactgaa tattcactac atgttcggtg ccatgcattg ccctttctca 300
ccctgaaagt tgggtgaacc ttctctggtg catcctaagc ccatgatatg attcgc 356

<210> 1172
 <211> 347
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-H6

<400> 1172

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 ccaaagccac actgaagaca gccatcagtt ttgtacctta gcatcatcat gtaacttcgc 120
 tactgtatcg tctctgagag cccccgtgcc ctcggacgtg gatctgtcct cagtttatga 180
 tctccttggc cagttgcaag atcatcagtg tgtagtacat ctggcactgg gtgaactact 240
 gatcaatact aaacgtttcg taacagtaca ttgtcctttc gcaccagag agttggtgca 300
 aacttcggtg gtgcattctg accccacgat actattcgct caatcag 347

<210> 1173
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-026-Q1-E1-H9

<400> 1173

aattcgcggtg tcgacgggca aattgatctt cggcattgca aggcgggttc ctcctccaag 60
 tacttcatag aagattttga acacaaaggt agtgtccggc tctgcaaaat aagtttccag 120
 atattgccat atagagaata atatttacac agatctaata tgctgatgta ttccatagcg 180
 tgacatcaca ctacggccaa gtctttattc gaatcaccac ctcagcgcgt ttatcgaggc 240
 ggtttccttg gcacgtcatg ttaaagtaga tatcatgtca ccttattccg ggatttctcat 300
 caatacgggt gtgggtaacc caaccgtacc tgttggtatg ttttctcgat caaaggcgag 360
 tcccaaacgg tcacggggag ggcccttggc attcaacctc ttataaagag accaaggg 418

<210> 1174
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-A1

<400> 1174

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 caggaagagt gcctacaaag attacagaac cggattgagg tgccgtatga tagtcaagat 180
 agagaacatc aggaagcact caaagccctt tggcatgctt cttttcctgg gactgaactt 240
 ctaggactag tatcagatca atggaacgat atgggatggc aatggaaaga tccatccaca 300
 gatttcaagg gtggtggctt tatctctttg gagaatttac ttacatcgc gaagaactat 360
 ccaaaatcca tcgatgagct cctttgttag caaaattgtg acagagcatt atgggaatat 420
 cc 422

<210> 1175
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-A12
 <400> 1175

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 gtgatggtgc tgaggacgag gagattgagg atgacgatgc tgaggatggt gaggatcctg 180
 tcaaggcgca atcctcatca aagaggaaga ggtctggtgg ggaggatgaa gatgatgacg 240
 acggtgatga tgatggtgat gatgatgaga agcctccatc aaagcgatag tcaatttggt 300
 cgtgctgac tgtgatcttc tctgcttggg ccaagaagga aaataatcct catggagagg 360
 attgttggtg aatgctgtag ctttaggaca tctgtggtag gtgtagcagc tcaaacttga 420
 gtctacccat gttagttggt agtgcatact gc 452

<210> 1176
 <211> 437
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-027-Q1-E1-A2
 <400> 1176

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 aaactatttt tttctcatgc ttcacttata ttattttgag agtcctacaa aacagcatgg 180
 taattttctt taattatgat aggcacccaa gattagtaaa aaaaaatctt atgagtgtgt 240
 tgaatactat gagaagtttg atgcttgata attgttttga gatatgaaga tggatgatatt 300
 agaatcatgc tagttgagta gttctgaatt tgagaaatac ttgtgttaaa gtttgtgatt 360
 cncgtagcat gcacgtatgg tgaaccgtta tgtgatgaag tcggagcatg atttaattat 420
 tgattgtctt ccttctg 437

<210> 1177
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-A4
 <400> 1177

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 attagagtca tgctagtggg tggttgtgga ttgtagagac acttgtgttg aggtttgcaa 180
 gtcccgtagc atgcacgtat ggtaacgggt gtgtgacaaa tttgaagcat ggggtgtttc 240
 tttgattgtc ttccttatga gtggcggtcg gggacgagcg atggtctttt cctaccaatc 300
 tatcccccta cgggcatgag tagtattact ttgcttcgag ggataataaa cttttgcaat 360
 aagtatatga gttctttatg actaatgtga gtccatggat tatacacact tttatgtttt 420
 catcattc 428

<210> 1178
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-B1
 <400> 1178

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 tacatcatct ccgtcaaggg catcaagggc cgcctcaacc gcctcccgtc cgctcgctc 180
 ggcgacatgg tcatggccac cgtcaagaag ggcaagcccc acctccggaa gaaggatcatg 240
 cccgccgtca tcatccgcca acgcaagccc tggcgccgca aggacggcgt cttcatgtac 300
 ttcgaagaca atgctggagt gatcgtgaac cccaaggggtg agatgaaagg atctgccatc 360
 accggacctg tgggaaagga gtgtgctgac ctttggccca ggatcgccag caacgccaat 420
 gccatcggt 429

<210> 1179
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-B11
 <400> 1179

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 ctctttataa aggcggtaga aattgtgctc ctccccactc gcctgttaaa atcgcttatt 120
 cccaagagc catgattgat ggcgcgggtg ggttacccat gcccgtattg atgagaatcc 180
 cgcgataagg ggacacgata tctgcttcga caagacgtgt caaggaaacc gcctcgact 240
 acgtgcagta gctggttgat agaaacgttt cgaataatga ccagaccgtg gcgtgatgtc 300
 atgctataaa aagctgctag catattagat ttgtggaata ttttgctctc tacggtggta 360
 tgcggaattt gtttttgcag agccagacac gattcctgtg ttcaaaatct tctatgaagt 420
 attcggagaa ggaacctgcc ttgcaatccc gaag 454

<210> 1180
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-B2
 <400> 1180

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 aactctagta gcttcgtgat agcgactgga gaacttttgt caatcactct cttatctgga 120

agattaactc ccacttgatt aaagtgattg aagtaccag acattctgag cacatgctca 180
 ctggctgagc tattcttctc catcttgagg caaaggtctt gtcagaggtc tcaacctctc 240
 aacacgggca tgagcctgaa ataccaattt catctcttcg aacatctcat atgttctatg 300
 gcgttcaaaa cgcttttggg gccccgactc taagccgtaa agcatggcgc actaaactat 360
 catgtagtca tcagaacgta tcttccagat ggtcacaaca tccacagaca acgccagagg 420
 ggttggcaca ctgagc 436

<210> 1181
 <211> 448
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-B3

<400> 1181
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 acaaacctaa caagacagag agagagagag atagagagag aaagagagag gaagaagtta 120
 ggtttgtgag aaatacggat acatgtaata tacatgagat gtgtgtgcat ctggattctg 180
 tatacgtgga aggagaagag acaacatgtt tgatgagaga gctggaaaaa catggacgag 240
 aggggaagga tctcgtgggt tgagcgattg aaaattttgt gcgggggaga gagggattgg 300
 taattttgtg caagagagag aggggtggggg gaggagtcag tcagccgtcg tcacatcacc 360
 ctgcttccaa atgaccccg c attctctagc acggtgtggt cgccgtcttc gatttgatca 420
 atgccctctt taaagattga ggtgttgt 448

<210> 1182
 <211> 452
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-B4

<400> 1182
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 tgacattatt aggttgatct acacgaacca ctctagggg aaaactgtat tgtggagtac 120
 accataaggt cacagtggca caatctgaag tagatcatcc tgtatacata gaagtgcaat 180

agaaccgatt agatgccatt aagcgtgcat gcaacaacag ccaccagaaa gcagcaccga 240
 ccttaactat atagtaatgt ggcgaatata gtatcagtcc tcatgcggtc gaactgatca 300
 taatttacat tgcaaatatt atagcatcat cactcgttag ccacatggct ttatttaggc 360
 agaggcatta cgtcatatgt caagcggcat caggaccagg tatttgccta taaggacatt 420
 ttggtgtaag gactaaaaaa actccgtgtc ac 452

<210> 1183
 <211> 471
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-B5

<400> 1183

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 aaggctgcac aaacctcggc gactgtacat gttccatgcc actctcagga ggcgcaagat 120
 caacagcgtc acggcgctag cagtgccata cgcattgatag cccaagacca agttggtgga 180
 tctcggggccg ctcaagacca gcatgcacgc cagcattctg gcacgagcgg ggcacggtcg 240
 cctggacaag atactgtctc ttctaacata gttagaagtt cgagcacgtc ccgctcctcg 300
 cgccgtccgc cactgccacc cgccactcca gcagaagctt tggcgcgagc tcaacttctc 360
 ctagattacc ctccaacgcc ggagaagatc gacgaatgga gagccaccat tcagagtctc 420
 atcgggtacg ccaacgggga cactccacgg tgaacgaatt cgtccccgcc g 471

<210> 1184
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-B8

<400> 1184

ttccccgggtc cacgggggaga agggaattgg agatggaacg gtcagctatg gaatggatga 60
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 ccatgagggt cgcattctacc agctgaagct gttctgtgac aaggactacc ctgagaaggc 180
 accatctgtt agattccatt caagaatcaa catggcttgt gttaatcacg agactggggc 240

ggttgacca aagaagttca gtttgctagc aaactggcag cgggagtaca ctatggaaca 300
 tgtcttgacc cagctgaaga aagatatggc ggcgacgcat aaccgcaagc tagtgcagcc 360
 tccagaaggg acattcttct agcggggtgt ttgctggccc atctccagtt ccagcagcag 420
 ctatctatgt cactcccatg ggatttgaaa tg 452

<210> 1185
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-C1

<400> 1185
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 tggagtaacg cattaagcaa gatgacatga tgtagaggaa ttaactcgag caatatgatg 120
 aaaaccccat cattttatcc tcgatggcaa caatacaata cgtgccttgc tgcccctact 180
 gtcattggga aaggacacca caagattgaa cccaaagcta agcacttctc ccattgcaag 240
 aaaaacaaat ctagttggcc aaaccaaacc gatagttcaa aaagaattac aaagatatca 300
 aatcatgcat aaaagaattc aaagaatgta acagcctcgt ttttggccct tttctttttc 360
 tttttgattt attggttttt gctctgtttt tcttttctga gcggttctat ggccttgcta 420
 cctgggaaat catcc 435

<210> 1186
 <211> 463
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-C12

<400> 1186
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 gaggccagag acccacacgt ttcacttctg atgggggaga gatggctcct actctggagg 120
 atgtgtcact tttgctcgga ctaccgttgg caggtcatgc cataggaccg ttggacgcac 180
 cggctgggtg ggagcgagcc cttacacaac gttttcatgg tgtttttttc ggatgctccg 240
 gatctgggtat gggagcatca cggacctaag tatgagtggg tgctcaattt ccgggtaatt 300

tccccaactt cttatcttca agttatcgtg catatggttt tacagaaaat aattgcggct 360
 aactaaaact ttctctttgc ttaatgcaga tccaaaactt ccgggcgccg ttgactgcgg 420
 aacagatcac tcggagccta gaggcctact tgatgtggtt ttt 463

<210> 1187
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-C2
 <400> 1187

ggtcggaaat taccgggtcg acgggcacgc ctacgtccag gtcgacgtct tctacgacga 60
 cgacccaacg gccaacctca ccgacgacca gtacgaagtc atccaccacg acagtgcga 120
 agaagcttga tctacttagc tgagcaagat ctatctacct atctatcgag ctaatgtgcg 180
 ccatggatta gagtgtgatt ccttcgagtg atctactgcg tcttaaattt atgtttgcaa 240
 gtgatgatct tgtagcgtag ctatatgtag tgtgtcctct ggcttttgca acctggcaag 300
 ctactatcta actaacgtgt tactgaaaat ccccgttatg ttgtccttcc aatcacccgat 360
 taaatcagtc ggtaatgcac agtttttctt ttctgaa 397

<210> 1188
 <211> 470
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-C3
 <400> 1188

cgcttgcccc tgccgggtccg aaattcacgg gtcgacgggg gcggccaagg agggcggcaa 60
 ggccaagaag aaggccaaga agagcgtgga gacgtacaag atctacatct tcaaggtgct 120
 gaagcaggtg caccgacaca tcggcatctc ctccaaggcc atgtccatca tgaactcctt 180
 catcaacgac atcttcgaga agctcgccgg cgatgccgct aagctggcga ggtacaacaa 240
 gaagcccacc atcacgtccc gggagatcca gacctccgtc cgcctcgctc tccccggcga 300
 gctcgccaag cagccgtct cggaggcac caatgctgtc accaagttca gtcctcctg 360
 agtctcgtag ttagctgttt ggggtgtgtt gtggccgtgt tatcggtgaa gaatcgcatc 420

gctatgtttc tggatctcga gaaatagtaa cggtgccctc ctcaatgttc

470

<210> 1189

<211> 446

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-C6

<400> 1189

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aaatccctgg ctggattccc ggccacgacg acggcgacac ctcttggtgt cgtcttcttc 120

cttgaggcgc ccgtcgaggt gcgtttaccc ctttccctcc cactctcatg cccgggtgaa 180

aactctagtc tcttcaggct gggcgccagc ggcgtttcat gcgtcgcat cttcttgaag 240

gtgccgcctt gggtaggttg ggggtgtgca gggcgatgg gtgtggtgtc aagtgtgtgg 300

cggctttgca ggaggagttg gcgccatggt cttcttggtg gggcaatgct ctgctatttg 360

gttgttcggt gcctgtcttg tggctgtttg ttcgctggct ctcaagtcca tggcatggac 420

agggtgaaga tagggttctt tccccg 446

<210> 1190

<211> 447

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-C7

<400> 1190

gtaccgggtcc agaattcccg ggtcgacctt ggcttttctt aggtgatttt aacgagatct 60

tatcactaga tgagaagggt gggggggggg atcgaccaca atgattactg gataatttca 120

gggaggccct ggagtcacgc gagctcagtg acattggcta ttacggtgat aagtttacct 180

ggagaaacca tagtaaggag ctcaagtacat acatatgtga acgcctcgat agagccacgg 240

tgaatgcacc ctgttgatg tggtttctta acttcagtgt cctcaacggg gtcctcgtc 300

actcggacca caggcccgtt attgtatgca ctcaaggatg aaatagaacg gagcgatgtg 360

gggatcacgg gttctgtttt gaggcgtggg ggctacagga cgaagggagt agtgaagatg 420

tgcaatgggc acagggggaa tgatgct 447

<210> 1191
 <211> 140
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-C9

<400> 1191

tacaactcac taaagtgagt cgtattaacg ggaactttac attccgattt ccgtcataca 60
 ccggcactgt ccactttcca cgcaacatct tcgtgttact ttacttcctc tatcgctct 120
 ggggccacgg cccttcctgg 140

<210> 1192
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-D1

<400> 1192

acgctggccg tgccgggtccg gaattaccgg gtcgacgaac ccaaattcct ccttcagatt 60
 gcaggatcca cgtggcattc aaggtctcga aggtagatta tgcgtccgca ccagtttgc 120
 gggatcgacg cgcgcgcgac cggcttcgcg catgatagcc accatgagtg cctcctccgc 180
 gtgggtggag acgacaatga cacgctagtt cctcctcgcc ggcgtgctgg agcacgtgct 240
 cgtccttctc ttcatacgct gcgtgcatag acgcggctcc accagctgct cccgtgcttg 300
 gcagcgcggc ggcctgtcga ggagggactg aagacgacgt gagcgggcca tccttcggct 360
 tcatggcaca gggatggcgg cgacacgctg gtgatgggcg agaaattgtt ggccagagca 420
 ggcgggcgcc gccatg 436

<210> 1193
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-D11

<400> 1193

gtaccgatcc agaattcccg ggtcgacggg gacgccatct atgctgccat ccactggctg 60

gacacgaacc atctcgtga ggcggctgac ttcgaggaca agatgaatga gctggtggcc 120
 ctgtgcagcc ccatcatcgc catcatgtac caggggtgctg gcgccgacat ggacggctgc 180
 atggatgacg acacgccggt tgcattctgc ggcgctggcc tcatgattga cgacgtcgac 240
 taagctagtc tatgttctgt ggcagagacc tgctgcttag ttattattat gtcgtgccct 300
 atcgttatct gagactgggt tgtgggtggt attgttttgg tccgagtggc cagggttatt 360
 ccgtggagta aacattcgtg gaacatcagt ggattatggg tcacgtcacg tctaagtaat 420
 atattaatct aaatcatcca gtggattatg ctgc 454

<210> 1194
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-D2
 <400> 1194

gggccgagaa ttaccgggtc gacggctata tataatgtta gttcaatttt tggctgtact 60
 aatctatagt agtaagggtc ccgtgcgttg caccgaagag tgaaatgcat tgatcgggga 120
 gttgtttatt ttgacaaagg atgtgggggt catctcatgt gtaacgggta tcgatagggt 180
 tcttgggata ttatctcatc tctagagctc acaaacatcc gggtgaaata gataaaaagg 240
 tatcttttgc aaacaaaacc gttcaactgt tcaacctgca tccaaaactt gtgaagaaat 300
 aacacttatt gtgctttgca agaaatgatc tttaagaatt agtttttgag tatcgattgt 360
 tatacatgtt ggctacagat gacatggcac tttcttatag tcaacaattg gctatactat 420
 taagtaatat taaccaatgc cttatacacc t 451

<210> 1195
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-D3
 <400> 1195

ccgtccgaa attaccgggt cgacggggat aggagtagac tgagagatgg gatagaactc 60
 catggcatcc gagggttcca gcggcgctcg cgctcgcgcc cggaaccat cggtgtcaca 120

catacctaga catcgcgag tggtgaaatt cctcaccggc ttgccagcgc gaggaaacct 180
ctcgtcatgt tccaactctt ccaatctggg aagcctcatg gtttaagtca gcgagcacga 240
catacatcct ccagagggat cagtgatcga catggatagc acaaagatcg taatcataca 300
tctgcaacta aataacacag acagtgaggc caaagacaca cgttctatga ctccacagga 360
aactcgcgag ggtataagat gtaccgcaga attttgggtg tgcataaatc atcccaaaag 420
cccaacttgg gcagtttctt cggattg 447

<210> 1196
<211> 478
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-027-Q1-E1-D5
<400> 1196

gtaccagtcc aaaattcccg ggtccacggg gtagaagtt gtaaataatgc attgttgtat 60
cgcgacctga atgaatgaaa taaacgaaat aacgctcttg tgcaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagggggg 240
ccccaaaaaa atttaaaaat aaaataacct ttaaaaaaaa ttaaaaaccc ttaaaaagg 300
gcccaaaaat taaaataaag ggccgttttt taaaaaaatt taaaaggga aaaacctggg 360
ttaacaaat taaaacctt taaaaaaa ccccttttcc aaaagggggg aaaagacaaa 420
aaagcccaa aaaaatgcct ttcaaaaaa ttgccaaacc aaaaggggaa aaggaaac 478

<210> 1197
<211> 475
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-027-Q1-E1-D6
<400> 1197

taccgatcca gaattcccg gtcgacggg agaagacgga ggaggaggaa tccatgggga 60
acatcctgaa gtgcttcagg ggagacgacg aagaacaaga agaccactac ccctactacc 120
gtccaggctc caggccccac taccgccagc agcagcagca agctgatggc catggcgctg 180

cctccctggc gcacgacctc ctcaactttg agagcgcgtc catggttcct gaagggtca 240
 ggcagcatgt tacggcgctcc aagaagcac agattaaatg gtaccagaat atgttggagg 300
 catataagaa tgcgagaacc ccaccgagaa caccggaaga ggctgcacaa ctagttgtat 360
 cagccctaaa ctggatccag agtgctgatt tggagggtat cctcgaattc tacaacttcc 420
 ccatcccatc actacctgca gcacccctca accaccgtcc atcctcgctg ccaga 475

<210> 1198
 <211> 456
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-E11

<400> 1198

gtaccgatcc agaattcccg ggtcgacggg catacaagaa taggaatcga gatatgggat 60
 caccttgcca aagacaatga atggtttgaa tgaatccaag catgctctat ttaatttcat 120
 aaattatcta gctgaggttaa cacatgttga tacgtctcca acagatctat aattttttat 180
 ttttccatgc tattatatta tctattttgg atgttttata tgcattaata tgccatttta 240
 tatgattttt gggactaacc tattaaccta gagcccagtg ccagtttctg tttttccttg 300
 ttttagagtt tcacacaaaa ggaataccaa acggagtcca aacggaatga aactttcgcg 360
 atgatttttc ttggactaga agacatccag aggtctttag tacatgtcag aaaagccacg 420
 aagcggccac aaggttcgga ggcgtacca atgggg 456

<210> 1199
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-E2

<400> 1199

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 cacttcaggt gcacgatcct tccgcaggag gagaagatcc cggcaatcat ctcccgttcc 120
 acggtgttcc atgagaggtt catggcaa ataccgtgaca aaacgggtgt aacatgtgtg 180
 ggattacatg caagcctcat ggattttccc aaggcgtttt tgcccgcgtt gacaacaata 240

ccgtgtagat gagacaaaat aacgcaacta catggcgtgt gtgtgtgaga ctatctcata 300
 ttaccactca gacgcctttg atggcaatth ggcaactgag aattttttatt tgagaaaaag 360
 aaacaagaga aaaaaaaagg cggccgcccc agaggatcca agct 404

<210> 1200
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-027-Q1-E1-E8
 <400> 1200

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 caagctgcag cttgtcatga agagcggcaa gtacacgctc ggctacaaga ccgtcctcag 120
 gaccctcagg aactccaagg caaagcttgt gatccttgc t aacaactgcc ctccgctccg 180
 caagtctgag attgagtact atgctatgtt ggcaagatc actgtccacc actaccatgg 240
 aaacaatgtt gatttgggaa ctgcgtgtgg taaatacttc cgagtctgct gcctgagtat 300
 catcgaccct ggcgattccg acatcatcaa cgcaacacca gctggccagt aaacctgtgt 360
 atgccatttt cagtgtctcg tctgatgcgt catctaaggt ggttctagag tgtagttctt 420
 gctggacttg atttgggtctt gtgtacatc 449

<210> 1201
 <211> 477
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-027-Q1-E1-F1
 <400> 1201

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 accgttagcc atggtagtag aagtaatagt tggcgagata acttcatgga gacacgatga 180
 tggagatcat gatgatggag atcatggtgt catgccggtg aagatgatga tcatggagcc 240
 ccgaagatgg agatcaaaag gagcaaaatg atattggcca tatcatgtca ctttttgatt 300
 gcatgtgatg tttatcatgt ttatgcatct tatttgctta gaacgacggt agtaaataag 360

atgatccctc ataataatth caagaaagtg ttccccctaa ctgtgcacca ttgcaaaagt 420
tcgttgtttc gaagcaccac gtgatgatcg ggtgtgatag attctaakat tcacata 477

<210> 1202
<211> 463
<212> DNA
<213> *Triticum aestivum*

<223> Clone ID: LIB103-027-Q1-E1-F6

<400> 1202

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aagctctacc gggaaattaa gaagcagaac cctcacattg gacacttcac aaaggatgtg 120
gcaaggcggg cctatgacac tgatttgata gttgatggct accaagacta cattaccgaa 180
gctgtgtggg tcaaggaaca gtatgacttc aagctgggta atctgatgga gcactacgga 240
ataaatagcg aggctgagat aataagtgga tgcattctta agatggcaaa taattttacc 300
aagaagaacg acgccgatgc tatcaggctg gcggtgaaat ctttgcgga ggaagcaagg 360
tcatggttca gcgagatggg ttcagatgag ggcgagggtg gtcacgaagc ctcgacgcc 420
aaggcatccg cttggtatca tgttacctat caccctgagt act 463

<210> 1203
<211> 457
<212> DNA
<213> *Triticum aestivum*

<223> Clone ID: LIB103-027-Q1-E1-F7

<400> 1203

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atcacagggg accaaatgga tatctctacc tcccctcgcc ggaccgcacg tataaaatcg 120
ccctttctac acaaccgcaa ttccttgctt cctcaatctc gactcatctc tccattgtag 180
tggtaatth ttgcgatcag ttcgagctcg atcaaagcga gaagccaccc acacacatac 240
ttagccgtag cagtgggtatt acttgctgcc gatcaatcag cagactcagg gcatatcggt 300
tgctactaca tacattcata atgtcgtcgt cctcctcctc gtcgggtgtc ttcaacctgt 360
accagctcac gccgtctccc atcgagcagc tctgctacgt ccactgcaac tgctgcgaca 420

ccatcattgc ggtcggtgtg ccgtgcaaca acctgtt

457

<210> 1204
<211> 468
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-027-Q1-E1-F9

<400> 1204

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agccggagca ggtcggggag caagagcttc atcggccggt gcaggcacca tggcccatcg 120
gcagcgatat cagcgtgaca gtccctgggc gcacaatcga catattgcag aggaggtgtg 180
atgagcagtt tgccatccac catgcaaaag atccagagct gtcggcggc atgatcgacg 240
gccacccga agagccgctg tcaccaatgc tcatcgagag cctgatgccc cgcaaggaat 300
gggcagagga tctctacgat tcagtcaaga cacgggcagc ctgcggttc atcattgcct 360
gcggcgcca tgtcaacctt gatcccaatg atatggtggc caggatcgag cgcacacctg 420
gcggagttga cgtccccgac anagtagaac atcaccaacg tgatatct 468

<210> 1205
<211> 453
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-G1

<400> 1205

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gcaaagccat tgctgaagaa gttggagagg aacagaatag gcctcaagag agctgcgttt 180
tatatggctt atgcgatata ttatgagaag cgtaggaggt ttcaggaggc agagcagatg 240
taccgcgtgg gaatccagaa ccttgcagag cctatcgagg agttacacaa atcacatgat 300
caatttatct atcgcatgga gttataccgg aagaggaaa ataaagaagg aatgcccagc 360
agagttaaac cacttcctag atgtgcaaac caagttgatg gtcaaagcag aaattataca 420

gaacttaagt ccaatcctgt gcaaaaattg gga

453

<210> 1206
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-G8

<400> 1206

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attattttcc tattaattta atattccttc cgtcttttat tttgcaatct ttactttcca 120
atctatatca taaaaatacc aaaaatatct atcttattat ctctatcaga tctcactttt 180
ggaagtggcc gtgaagggat tgacaacccc tttatcgct tggttgcaag gttcttattt 240
gtttgtgtag gtacgaggtg acttgtgctg aacctcctac tagattgata ccttggttct 300
caaaactgag ggaaatactt acgctacttt gctgcatcac cctttcctct tcaagggaaa 360
accaacgcat actcaagagg tagcaagaaa gatttctggc gccgttgccg gggaagctta 420
agttaagtca agacattaca a 441

<210> 1207
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-G9

<400> 1207

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cccaagatcg cagatccgct ccggtgagaa tccgtcgcca tgtcttcag cgaggctgcc 120
tgcacccttg ccgccctcat cctccacgat gacgggatcc ccatcacttc tgagaagatc 180
gcgacggttg tgaaggctgc cggaatcaag gttgaggcct actggccgc gctcttcgcc 240
aagctccttg agaagaggag cgtcgatgac ctcatccttt ccgtcggatc tgggtggaggt 300
ggtgctccag ctgctgctgc tgctgecccg gctgctggtg gtgctgctgc cgctgaagag 360
aagaaagaag agaaaaagga ggaggccaag gaagagagcg atgatgacat ggacttcagc 420
ttgtttgact aagca 435

<210> 1208
 <211> 151
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-H1

<400> 1208

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 ggaaacaagt tccggatgtc cctgggtctg ccggtggcaa ccactgtcaa ctgcgctgac 120
 aacactggtg ceaagaacct gtacatcatc t 151

<210> 1209
 <211> 463
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-027-Q1-E1-H3

<400> 1209

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 cctgcttcag gtgccaccac tgcaagggca ccctcaagct cgccaattac aactccttcg 120
 aaggagtgtc ctactgcagg cctcactttg accagctctt caagaggacc ggcagcctgg 180
 acaagagctt cgaaagcact ccaaagggtg tcaagccaga aaggaatgtt gggaatgaga 240
 atgtactaa agtctcgagc gcatttgctg gcaccagaga gaaatgtttt ggatgcacca 300
 agacggtcta tccaattgag aggggtactg tgaacaacac catgtaccac aagagctgct 360
 tcaaagtctg ccatggaggg tgcaccatca gcccttcgaa ttacatcgcg caccaggggaa 420
 agtcctctcg caagcancaa cacaccagc tgatcaaaga gaa 463

<210> 1210
 <211> 363
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-027-Q1-E1-H4

<400> 1210

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caagcagagg gtcacggcta agggccggtt gggtgccact gctgctgtgt actctgcagc 120
aacccttgat taccttactg ccgaggtcat tgagctggcc ggcaacgcta ccaaggatct 180
caaggtgaag cgtatcaacc ctgccacct gcagcttgcg atccgtggag atgaagagct 240
ggacaccctc atcaagggca ccatcgctgg tgggtggtgc atccctcaca tccacaaatc 300
actcatcaac atgacctcca tagagtgaat gacatgcaat aacaggtaat tgttgtgtgt 360
tgt 363

<210> 1211
<211> 452
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-027-Q1-E1-H6
<400> 1211

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caccacattc tttgggcgtc ccaaaaaccc acaattttct ttgctaattt tctcaataaa 120
cacttatgac caatttaggc agaattaatc taatctctga catgtcaaca cggttggtcag 180
atccacgtga cactgcaaat caacttggtg ttgagttggt taggtgaata gtggtatccc 240
caaccaccca ggggttcaaat cctgggtgctt gcattattcc tgggtttatt tcagaatttc 300
caagatgata tgccgggtca gtctctcgga ggtgctcata gggatatggt gttcgtgtgt 360
gcgttcatag gggtgagtggt atgcgcgtgt atatgagcgc ttgtgtctgt actgatgctc 420
aaaaaaaaa gatccatgtg acactaattc ac 452

<210> 1212
<211> 450
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-027-Q1-E1-H7
<400> 1212

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gtgaaactgc atgtaagttt ggtatgcatt catcttgtgt accatttacc gtacaagatt 120
tcatgtggtt cgtgtatggt cttttggtat tcatttaata attgtgaaaa taaattgcaa 180

tgatgcggca tgtctttaac ctaaattggca tcaaaggagc aattgctgcg gtcgcaaagt 360
 tgcctgatat cgctgttcaa gctgatgtgg ttagtactct caagggaaaa cttggtcttt 420
 t 421

<210> 1215
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-A12
 <400> 1215

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 ggggatgatg gtttcgtttg ccaaaaatgt tgctaatttc atcagtagca ttgggaagga 120
 ccatgttggt attctttcaa gtttagattc tggcaagaga agagtaattg atgcatccag 180
 tgatatgctg tattaccttt caagctgcaa tgaggatggt tctgatccag aatgtgagaa 240
 actagggtgg aagaaacttg aggaatatga tccatctcaa cgactgtgga aatgtcttgc 300
 tagtctaatt gaggggtggtg ttctttcaga agatatggct gatgatcctg aagagatgac 360
 cgcaagtgat tactacgcga ccttgccact tgcagctcta ttc 403

<210> 1216
 <211> 383
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-A4
 <400> 1216

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 gcggctagaa gacaggggaag acgagatcga acaagagcgt ggagacgtac agaatttaca 120
 tcctcatggt gctcaaccac gtgcatctcg acatcggcat ctctccaag gccatgtcca 180
 tcatgaacgc ctctcatcagc gacatcgctg ataagctcgc cagcgagtct gccaaagctg 240
 cctgctatca cgagatgccc accaacacct cacgggggat gcagagcacc gtcggccaca 300
 tcatcgctcg gcagctcgcc gcgcacaccg tctgagaagg cagcacagcc gtcaccaagt 360
 tcaacggcgc ttagaaaatc tgt 383

<210> 1217
 <211> 381
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-A6

<400> 1217

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 gttcaggctg ccggtggaat atacgagaag gtgatctgca attacttcct tttggccctc 120
 acaccaacg ataaggtttg gctcatgcat ttaccggagg actcgatttc gtcacgcgaa 180
 gacctgtgcc acgaattcat cgggtgccatc accggtgggc accacgaact cggcaagccc 240
 atcgacctac aactttctcca gcataaagaa ggacaaaccc tccgtaaata cttacaacga 300
 ttttaatacac ttcaaacgaa tattccaaat atctatccag cagctgttat aacagccttc 360
 taatctaata tgccgacatg t 381

<210> 1218
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-A8

<400> 1218

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 ttcgagcact gcgagaagga gcctaatagcc gtctaccacg gaccctcttc agctctggca 180
 ccaccgtcgc catcaagcgc ttcgaccgct ccgcctggcc tgacgcacgc cagttcgtgg 240
 aggaggctag ggcagttggg ctgttgacga gcggtcgctt gtccaacctc atgggatgat 300
 gctacgaggg tggcgagcgg ctgctcgctt ctgagttcat gacgcatgat accttggcag 360
 ctgtgattcg tagtgtggtt agggtttgtt aagtttacta gtccttcat tgatgatggg 420
 tggcccgtgg tgcttt 436

<210> 1219
 <211> 397

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-028-Q1-E1-A9

 <400> 1219

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 ttagcaatgg cggaataagc aggttcaagt ttcattctgc gcaaattccg agcaaaggcg 120
 tcaacccttg cgtcagggtg acggatgatg tcagggaaaa ggtgatcgct ctcatagaag 180
 ccatggaatc acacagggag ctcgagcttc tcaagagaaa acgtgttgct gaactgtcgg 240
 tgcttccgaa aagaacacgg gaacttccat ctgagccttc ctccccaggg ttgcctactt 300
 cgctgctat taatcctgca ttcgatccga gtcagctcct tggcctggaa gtgctgctc 360
 cggtacttag actatctggg gctgccacca agccccg 397

<210> 1220
 <211> 424
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-028-Q1-E1-B1

 <400> 1220

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 aaatagtttt taaaccatag agaagttgga atacagtagt tataacacca atataaataa 180
 ataatgagtt cattacagta ccttgaagtg gtcttttggt ttctttcgct aacggagctc 240
 acgagatttt ctactttaag ttttgtgttg tgaagttttc aagttttggg taaagatttg 300
 atggattatg gaacaaggag tggcaagaga ctaagcttgg gattcccatg gcacccccaa 360
 gataatataa gtacacctaa aagccgaaac ttggggatgc ccangaaggc atcccccttt 420
 tcgt 424

<210> 1221
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-B11

<400> 1221

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agcggctcgg gtcttgctg cagcggcggc agcaacatca gcttccattg aggccaaagt 120
gttcgccaga attgtcctta ggaatctgga acaccatcag gcacggactt caccctgaaa 180
acacaatggc gagcacaagc gcgactaatt ctccaacatg gtatgacttc taacctttgg 240
ccccagaatg gatgcaaact cgcggttaag ttgtcgccgg catttgaagc tgccgcgcaa 300
gctgtgacct tggcacttcc accttgagga gaactgtcag aagagatgaa tgaacgttca 360
accggcagct gttgagtgtg caattttcct gttgtttgt 399

<210> 1222

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-B12

<400> 1222

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tcacttatat ctttttagagc acggcggttg ctttattttg tagaaattgt tgatctctca 120
tgcttcactt atattatttt gagagtcttt tagaacagta tggatatttc tatgggtata 180
aaattgggtcc taatgatggg catccaagtt gggataata gaaactatca taggaagtga 240
attggatgct atgatcaatt tgatacttga taattgtttt gagatataga ggtggtgata 300
ttagagtcac gctaattggg taattgtgaa tttaaagaat acttgtgttg aagttggcaa 360
gtcccgtagc atgcacgtat ggtaaaagtt gtgtaacaaa tttgttgcac gggatgctcc 420

<210> 1223

<211> 408

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-028-Q1-E1-B2

<400> 1223

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tcctgaaagt tgcaacctct ccctctcggc gaatttgggg tttctgaggc gcgcgaggta 120
aaccaagggt ttgctcatgg ctgctactaa gcagaccgct cgtaagtcca ctggaggaaa 180
ggctccaagg aagcagctag ccaccaaggc tgcccgtaaag tctgctccca ctactggagg 240
agtgaagaag cctcaccggt accgccttgg aactgttgc tttcgtgaga tccgcaagta 300
ccagaagagc acggagctgc tcatcaggaa gttccattc cagaggcttg ttatggagat 360
tgcccaggac ttcaagactg acctccgctt ccagagccat gcggtgct 408

<210> 1224
<211> 414
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-028-Q1-E1-B4
<400> 1224

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cgatgtttga cagggtcccg gtgcggaacc tggtagctg gaacgcgctc attgccgggt 120
acgcgcaaat cgggcgctcc gaggaggcgt tgcatgcctt tctctgatg ttggaggaca 180
gggtcaagcc ggacgagttc accatggcca gcgtgctgtc tgcctgcgcg cagctcgggt 240
cgctaaagga agggaggaag gttcatgact tcatggaccg gatgcgtata cggaagaacc 300
acttcgttct gaatggcctg gttgatatgt acgccaagtg cggcgacctc gagcacgccc 360
gcaagggtgt cgacagcatc caacggagga atactgaatg ctggaactcg atga 414

<210> 1225
<211> 423
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-028-Q1-E1-B6
<400> 1225

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ttgtgatcat gcaccagagg gacgaagtgg agtacaagag ggagcgccat gtgattgtcc 120
gcaaggcttg agctgaaccg aatgatgga actaccatgg aaaccctctg gccatctgat 180
gtgtgtgtat aagtagtgct gacactgcag cctgtttcct gaggaaattt gttgcgtcgt 240

tgaaattgag ttgtagttgt actactttaaa gctgtagctg tagccctaaa ttatcttggtg 300
 tcgaactgaa gatgtaccac agtaagttca ttcattgattg caacatttgg gcgttctgca 360
 gctgagcaga gttaatgcct agaaaaaaaa aaaaaaaaaa aaaaaaaaaa aagcggccgc 420
 tct 423

<210> 1226
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-B7

<400> 1226
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 tatacgcaact ctcacccttc catcattgct agcctcttcg atgccgtgca ttggcctttc 180
 ccaccttgag agtcgggtgca aacttcgccg gtgcatccaa agtcgtgat atgatatgct 240
 ctgtcacaca ttaacctccg tatactcttc tcaaaacagc caccatacct acctattatg 300
 gcatttccat agccattccg agatatattg ccatgcaact ttccaccgtt tcatttatga 360
 cacgtttcat cgttgtcata ttgctttgca tgatcatgta gttgacatca tatttggtggc 420
 aaagccacca tg 432

<210> 1227
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-B8

<400> 1227
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 tatacgcaact ctcacccttc catcattgct agcctcttcg atgccgtgca ttggcctttc 180
 ccaccttgag agtcgggtgca aacttcgccg gtgcatccaa acctcgtgat atgatatgct 240
 ctgtcacaca ttaacctcct tatactcttc tcaaaacagc caccatacct acctattatg 300

gcatttccat agccattccg agatatattg ccatgcaact ttccaccgtt tcatttatga 360
cacgtttcat cgttgtcata ttgctttgca tgatcatgta gttgacatca tatttgtggc 420
aaagccacca tgcataa 437

<210> 1228
<211> 411
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-028-Q1-E1-C1
<400> 1228

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aggggcagga tggcaatgag gttttcttcc gcatcaagag atccacacag ctgaagaagc 120
tgatgaacgc ctactgcgac cgtcagtctg tggatctcaa ctccattgct ttcctttttg 180
atggtcgtag gctccgtggt gagcagaccc ctgatgagct tgagatggag gaaggcgacg 240
agattgacgc catgcttcac cagaccggag ggggctttcc tcgcccttag aaggagcttg 300
ctgcagcctg gctgttctat gtcgtatgct acctttagaa ctagagtaaa atgtaagaag 360
tgaaagaact tgcgaggcta tgattctgtg ccatagcctg angggggggtc t 411

<210> 1229
<211> 426
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-028-Q1-E1-C10
<400> 1229

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aagcctggca tgtaaactct attgcagttg ctctggtctt taaagaaaat tgttgtgctt 120
tttgtatgat tgatactttg caataacatg gttgcatgca tcaatcgatg caaaggcccc 180
agggctccct cttttattga aaaagggttac catatacaag agcatgtcat aatataatga 240
gacaacacaa taaagcaacc ggagaatgta cccaatgaaa atgatttgta atggacaaca 300
aaaatgagaa aagaaaattg aacttacaat gataatttta agggtaacat caaggccttg 360

tttctttaac ctaagaacca ttctatcctc caaagcacga acttgggtcca atatataaac 420
aatctg 426

<210> 1230
<211> 139
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-C11

<400> 1230

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ccggcggcga cgggaagacg acgggccgga agaatggcag caaggccaag aagggcgtgg 120
agacgtacaa gatctacat 139

<210> 1231
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-C12

<400> 1231

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ggcgacaaga agggcaagaa gaaggccaag aagagcgtgg agacgtacaa gatctacatc 120
ttcaaggtgc tgaagcaggt tcaccccgac atcggcacat cctccaaggc catgtccatc 180
atgaactcct tcatcaacga catcttcgag aagctcgccg gcgaggccgc caagctggcg 240
cggtagaaca agaagccac catcacgtcc cgggagatcc agacctccgt ccgcctcgtc 300
ctccccggcg agctcgcaa gcacgccgtc tccgagggca ccaaggccgt caccaagttc 360
acctcctcgt aaagtgtcc tgctcctgtg tctcgtagtt agctgtccgg gtgtgtttgt 420
ggccgtg 427

<210> 1232
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-C2

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 gcgctctctg ttcgccccgc cgcccgcgga gatgctatag tggtagagtg tatactctct 300
 cctccgcggt gtgcctctgc gtgtacatat atggatactc tctctgtaca gtgacaccgg 360
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<210> 1235
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-C7
 <400> 1235

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 cttgactggg accccaaggg caagcttggc cctaccaccc cgctgcctga ccttgtcacc 180
 atccaccccc cgaaggagga ggacgagctg cgcccaccgg ctttggttga ggtctaaagt 240
 cccaatagag caagcagacc atgaaacggc acatcatttt ggtcctagct acttttctat 300
 ccctgtgata agcgaggggt atgcaacgct tggttaccta ccttaccttt taatggacaa 360
 aagtttctgt gtaatgcttc tatgttaatt tcgtttaaac taagttttgc cgagacaagt 420
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<210> 1236
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-C8
 <400> 1236

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 tacgtgtata ttttgaatgg tggggcagta agctggtgca gttgcaagca aagcgctcgtg 120
 acgggtactc gaccgagacg gtggtgaccg ccaccggcaa cgaggggggag tacgagcgga 180
 tcaccaagga ggagaagcac cacaagcaca aggagcacct cggcgagatg ggcgcccggc 240

ccgccggagc cttcgccctc tacgagaagc acgaggcgaa gaaggacccg gagcacgcgc 300
acaagcacia gatcgaggag gaggtggccg ccgctgcagc cgtcggcgcc ggcggttcg 360
tcttcacga gcaccacgag aagaagcagg accaca 396

<210> 1237
<211> 377
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-C9

<400> 1237

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tatgaggcct aagatgtgtc atgagtgggt tgagtgcagg ttctattaag catctaccaa 180
actagtcttt ggttgtttac agttttgaga tttgtatctt gggaaccttg tttgtgtgaa 240
ctgaactgat ctcttgtgtc ttgagcactc aagcgttatt tgctgctcta tatttgatat 300
atggtattga gttgcattcc acaccataaa agccatcgtt cgaaaacaaa gcgggcgctc 360
tataggatcc aagctta 377

<210> 1238
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-D12

<400> 1238

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gacagataag ccaaccactg gatgtggttt tcagggtatt ttgcagtggg atttgtaggg 120
tactatgctg cgctgtgttt gggatttgaa ataaaacgat gggagatgtg ccacgctccc 180
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaagc ggccacccaa caggattaaa 300
ggttacatac ccatgcatgc gagttcataa cccttcaata gtgtcaccta atttcaattc 360
actggccctc gttttacaat ttcgtaacat gggaaaaccc gaaatgttac ccaattttaa 420

aaccc

425

<210> 1239
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-028-Q1-E1-D2

<400> 1239

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tatgaaggaa gggaatatca gattccaatt tccattaaga aaaggcatgg agcacttccc 120
aaaaaataaa attaaattac cttatgaatc tatcatgcgg tctacttatg aattaagtgc 180
caaagatggc actacttaga tctatcctcg cttttatgcc tagctagggg cgtaaacga 240
tagcgctagt tgggaggcaa cccaatttta tttgtgttct ttgtttttgc ttctgtttat 300
taataaattt tgcattctaca ttctgttttag atgtgttttt atgttttaat tagtgtttgt 360
gccaaagtaa acctatagga taacctatgg tgatagttaa tttgattctg ctgaaaaaac 420
agaaattttg cgcgcagtaa attagttttg 450

<210> 1240
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-D5

<400> 1240

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acaacgagca gcagctgggc gctctcgaga gaattaagcg aaggcgtcaa taggggtcaaa 180
gattgtgatc caagcacgcc attacctgtc gttgagccta atgatgttgt agctgtttacg 240
tgtaaacatg ttctttgcta gcgtttgttc ttctgtaca aggattttgc aggagttaat 300
ccggtgttga tccgcagcgt ttttctgtgt acaaactgta aactcttggg acacgtgtcc 360
atcattttca gtgaaatttt gtcgattcca agg 393

<210> 1241
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-D6

<400> 1241

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 gcagcaaggc gaagaagggc gtggagacgt acaagatcta catcttcaag gtgctgaagc 180
 aggtgcaccc tgacatcggc atctcctcca aggccatgtc catcatgaac tccttcatca 240
 acgacatctt cgagaagctc gccggggagt ccgccaagct ggcccgtac aacaagaagc 300
 ccaccatcac ctccaggag atccagacct ccgtccgct cgtcctcccc ggggagctcg 360
 ccaagcacgc cgtctccgaa ggcaccaagg ccgtcaccaa gttcacatcc tcctaaactg 420

<210> 1242
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-D8

<400> 1242

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 cgtatccgtg gtatcaatgc aatgcacca aagaccaaga agatcttgca gcttttgcgt 180
 ttgaggcaga tttttaatgg tgtgttcctt aaggtaaca aggccacat taacatgctg 240
 cgtcgggttg agccatatgt tgcctacggg taccctaacc tcaagagtgt caggagctg 300
 atctacaaga gaggttacgg aaagctcaac aagcaaagga tccctctggc caacaacaaa 360
 gtcacgagg agggtttggg gaagcacaac atcatctgca ttgaggacct tgtgcacgag 420

<210> 1243
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-E12

<400> 1243

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gtccatttgc tctagcttca cttttatgct tcgtgcgatc ttccccactt catcgatgtc 120
tttctccatg cgtcccttga ttgctggaag atgcatcatt taaacgctcc gcgtatatct 180
taccacatta ccactcagaa atgcaatcag tacatatata caagtaaagg atggagttca 240
agcctttcat tgcagaggcc ttagtggctg attttgactc ctcgttggct tcctgcaggt 300
ggaaagaaag aattaatttt ccttgtcaat agtacaagtt agagactaag gtgatggcaa 360
gatgtaacta aatattgttt taaaaaggga aagagctcat gtctgaaacg tctgaaac 418

<210> 1244

<211> 441

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-E7

<400> 1244

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gtaatgacat ctcagatgga gaaacttgat ctaacagaga cataacatgc gcgaaatttg 120
gcaaggcaaa cctgttagtt ggcagacgag cacaacatca gtaagaatgt atgcaagaca 180
tatatggtat aattttgaga taaacaacaa ataataatac tcacatcggt acggttaaac 240
attctcggat gttgtatgag cgtcggtcgc agcgcttggt ttaataataa gatcctttga 300
gtagtagagc atgaagaggg caacgatggt catgagctca ccaccgtcat ttaggtgctt 360
ggcatggaaa ttctcgttgc agcggtgaagc cgcgtagcac aacatctcca cccacacatc 420
gcggatcata tgaagtgttg t 441

<210> 1245

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-E8

<400> 1245

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 ccaggagatg ttccggaggg tgagcgagca gttcactgcc atgttcagga ggaaggcttt 120
 cttgcattgg tacactggtg aaggcatgga cgagatggag ttcaccgagg cggagagcaa 180
 catgaacgac ctcgtctcgg agtaccagca gtaccaggat gccactgctg acgaggaggg 240
 cgagtacgag gatgaggatc aggagcctga ggaggacatg taagggtgga tgtccatgtc 300
 gtgctttgct ggggtggggg tctgggggca gagtttgatc tgtttggtgc tttgttataa 360
 atctgtttat catcgcaact accgcttgta cgccaccgcc attcttctg cctttcctaa 420
 gctctgt 427

<210> 1246
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-F1
 <400> 1246

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 tcggggatac agcgggggtat ataagtattt agaaaaataa atatgaaagt atatagaaaa 120
 ataaatttga attaagatct aatgagaatt ttttagtact ggatatatat tgtctccttt 180
 ctattcatga aagactgaga gcagtccact cacagcccat gtagctgtcc gtccacttag 240
 agcccatgta gctgtccatc cacttagagc ccatgtaagg cccaattcca gaaaacccta 300
 gactagtagc actccagctg ctccagccga cccaacctc ccattctcgt actccctttc 360
 tccagccgcc agtgaagaaa ggaaacgaca gcgccgcaa 400

<210> 1247
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-F11
 <400> 1247

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gagtcaaagc tggcttgctg cagttaaacc ccaccatccc tttgttgata atgatgcata 180
 tgtagttagt tctgatgtaa gtcttgctgg gtacatttgt actcacgttt gcctatttta 240
 tgtttttgca gagagacttc agtctcatta gtagttccgc ttggacttcg acgttttagct 300
 tgttacctca gctacgatct tgtgccccga caggatctgg tagatagtca gacttctcag 360
 cctttttcat ttctagatgt ctgtactcag acatgatagc ttccgcttgt gcctttgact 420
 tgta 424

<210> 1248
 <211> 405
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-F12

<400> 1248
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 ccagctctct ccccatgggt tgttgcttgg gttcggaaaa gtgccgcagt gtttgcttga 120
 ccggtttaaa tccctttaat atattgaggc tatgttcggc caacttgcgt gggatccctg 180
 gcatacttga cgggtgccag gcaaatatgt ccaagttttc gcagaggaat actcatagt 240
 cggcgtcaac tgttgggttc agctacgtc cgatagatgt tgtcttcttg gggccggttg 300
 ggtggacctg gaatttgact atttcttctg ctggtttgaa ggaggtggat ttggggcggt 360
 tatcgaggat tatgtcgtcc ctgtccacca tggagcacag tgcag 405

<210> 1249
 <211> 443
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-F2

<400> 1249
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 ctgctaggac ccacgggaag ggccaccgta ttgcgcgaaa aaaaacattc ccccgctgtc 120
 agctcggacc caccagaagt gcctccttat tacgcacaaa aaaatgaata ctccccctgc 180
 tggttgggac ccaccttggg gggaggatga ctgtgtgggc tactaagttg aaggggatgg 240

agtgctttgt caacttagtc aatatgaacg attctagctc cagtgaccgt acgatgtcca 300
 tccaatggct gcagtgttc ttcaacctct ggtcttggtg ctccagccgc ccaaagcagt 360
 gccggtcgtg ccgcatgtc ctgcctccca tggccggtg tgctgccgcg gaagcctcaa 420
 cgccccgtac tattcccaac aat 443

<210> 1250
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-F5
 <400> 1250

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 agagcaaacc ttatccagag ctggatgagt cagctttggt ttagagccaa gccaaagctgt 120
 cgcgtgtggt tgaaatctca ccgttgggca cgtatcagtt ccttagtgac ccaagggtcat 180
 ttcggacata tcatgtcggg ttgcctcctg gctataaata gccactccc tacaccataa 240
 atttgtggct gtcagagtt agtgcacggc ttttttcgtt tgagaacaac cctcctccga 300
 agcatttgag agagagagag atcattgcca ggactaatgt cacatcccta gttctggtat 360
 gctcaaggct agctagtcac gtgtgcatca tgtttcaatt ccatttaaata ttgaaatgag 420
 gatttg 426

<210> 1251
 <211> 431
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-F6
 <400> 1251

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 gaatctcctt ccattggaat ggctgccaag cgtgaggccg cagcaatcat gttatccagg 180
 gggctcgaaa agtgaccgga tgggtgtaggc acatactgtg gcagggttaac tgtccgtcga 240
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gctgtcggat tactcggccc ggcgcctggc gtttgaaaga gatttattcc ttcgtaaacc 360
 ggtggcaggc gcgaccgata cttcgttcat aacacctcct ctgacgcggc cgggtctagc 420
 atgagccgat a 431

<210> 1252
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-F7
 <400> 1252

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 caaagtataa accataagtt gctgttctca gtgattcaaa gtgcatatag tgactcacat 120
 ctccaacaag gtacattgct gatatgagac tttgataatg cagtgtccgg aagcgacaag 180
 caaaatgtta attctgtgag catcactgca ccgatgtaat gcatgtagac atgttaacat 240
 gtgcttagct atactgtaga aattggtaac cctttgcaat ttggttgcat ggttgcttga 300
 gagagaccat cttcatccta tgccacatac tgcatgctta catcttacgt catccaattt 360
 caggacactt gcaactgctc tacaaacctc agcacat 397

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 <211> 359
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-F9
 <400> 1253

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 ccctgctctt cctgagggca ccgtcgtggt ctcaacatag caagaagagc ggcacggctg 120
 gatcggcgaa agagatggca ttttctctg accacactca cccttgacat tctcccattg 180
 aaagatctgc ggtttacttc agctctggca ccattgaggg tgtgcgctaa ttttctttgg 240
 caaaggctgt agcttccaga gtgctaagtc gaaagcctga gacttgaaag tgttattgct 300
 tcccttgtga taccctaata ataaatgcat ttggcgactt aagcacttct gcgcccgtg 359

<210> 1254

<211> 390
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-028-Q1-E1-G10

 <400> 1254

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 aatggaaaat tcgttcctac gagtccttgg ccaactggag ttggacttgc cggaggcccc 180
 tgaaaaggcc ccacgtcttc cggcacaagc tgttgacccc ttagcaaagt ttaggccaca 240
 gaaggagata gaacacatat tccgtgtgcc agagaagagg ccaccgcagg aagtgtcgct 300
 tgcatttact ggccctcatc tctgcctttt cattgggttc ttgattgggc ttatgcgtct 360
 gggagtcaac ttgaagaact tcccttcctc 390

<210> 1255
 <211> 404
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-028-Q1-E1-G11

 <400> 1255

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 accatagaga agtttgaata cagtagatat tacaccaata tgaatttaga atgagttcac 180
 aacagtacca aaagtgggtga tttattttct tatactaacg gagcttacga gttttctggt 240
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 taagcttggg gatgcccag gcacccaag gtaattattca aggaaaaaca agagcctaag 360
 cttggggatt gcccgaaaag gcatccctc tttcgtattc gtcc 404

<210> 1256
 <211> 436
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-028-Q1-E1-G5

<400> 1256

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accggaacga ctcggttgac cgggccatgt acgatctctt cgtgtccatg tgcgagaaga 120

acggccagac cctccgccc atgccagtca ttgctccggc gggcacggtg agtttcattt 180

gaatgggtcat tagttactag tcttcacatt tgagttgcat catgctaacg atacattgga 240

aataatcttt ggtgcaacat aactcccaac aagcatcgac cgatccttct cgtctgcca 300

ctggcgcgac cggtcctaca cctacacctc cgtgatgacg atttgcttaa gatcatggaa 360

gcttgggttg atggagtgt tgtatttagt tttgttttg accttatgaa acttgctacc 420

tatggatgaa actgtg 436

<210> 1257

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-G6

<400> 1257

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cccgggtgggc atattttcat cagggaatcg tgcttcacc agtctgggga ttccaagagg 120

aaagtgaacc cgacgcacta cggggagccg aggttctaca ccaagggtgt taaggaatgc 180

cactcctatg accaagaggg gaattccttt gagctttctc tggttaacttc caagtgcatt 240

ggagcttatg tgaaaagcaa gaagaaccag aaccagatat gttggctgtg ggagaaggtc 300

aagtgcacag aagacaaagg ctttcagaga ttcttgaca atgtgcagta caaatccact 360

ggaatcttgc gttatgagcg cgtgtttggg gagggttatg ttagcaccgg tggattcgag 420

accacaa 427

<210> 1258

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-028-Q1-E1-G7

<400> 1258

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 ggctagtttg agctagttgc atctaaccba ccccaaaaaa ctatccaacc caagaggtgc 180
 taattggagc tagttctct agtgcattta ttgtcaatct aaccctgtca tccaaacacc 240
 tctttggatg gagttagttc aggggttagtc atgagctaga aactaactct aacctctagc 300
 taagttgagt atccaaacag ggctatgttg ttgttggtgc tgattctctt ctacgtatat 360
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<210> 1259
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-G9
 <400> 1259

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<210> 1260
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-028-Q1-E1-H5
 <400> 1260

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<210> 1261
<211> 365
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-028-Q1-E1-H7
<400> 1261

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gttcattggc gcgtcacact acgcctacaa caccctgaag atgccgggac ctgtgacgat 240
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aaaaa 365

<210> 1262
<211> 426
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
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<400> 1262

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tcccagttcg taccaccaac cgggactaaa gtgttggtcc tcgttgccggc cagagtttag 240
tcccacctcg ccaaccgaag ggggctcaca ccggtttata agcccctccc tctctgcctt 300
gttgagctcc tctcaaaatg aaaatagatg cccttatata ggaaatttga cctanattca 360

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aagctc 426

<210> 1263
<211> 405
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-029-Q1-E1-A4

<400> 1263

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gtcggactac tcgtcgtcgt gggcgcgcgc gctcgtgcat atctcgccct acaccttctc 180
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catcacgggg agcagtctca tcggggccgc catcaaggcg cccaggatca cctccaagaa 300
cctcattagt gtcattcttct gtgaggccgt tgcaatttat ggtgtaatcg tggcgatcat 360
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<210> 1264
<211> 343
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-A5

<400> 1264

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ggcgagctct tcaacaggga cagaagatgc tgaggctcct ccctccggca gctctgctga 240
gccagttgta ccgagaagga caacaaggga gaggaaggca gcagtagtct acgttgcttc 300
tgagagcgac catgatgatt ctgaggatga aaatttttcg gaa 343

<210> 1265

<211> 451
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-029-Q1-E1-A8

 <400> 1265

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 gggcttgacg gtttatcagt gtctcggacc gggcttgctg gtttatcaga ctggcctgtt 180
 ggggtcaacct ccacttggtc aacaacaaaa tcataatctt gcggcggtgg gtcattaagc 240
 atggcatcgg catttgatc ctccagatct agagtttttt ccggttcaat agctacattg 300
 tcgtcagcgg gtttatttaa cggggccttc ttgttgggtc aaggtttggc actgaagaga 360
 acaaacataa aggtcaatac atcggacaaa tataatatat caaggataaa attaanacat 420
 aactcaacca ggaaccgtct tgaggggtgg a 451

<210> 1266
 <211> 240
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-029-Q1-E1-B1

 <400> 1266

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 aatgattaag agaatcggga gtccggattt atagtttcac aaattctaca agctcgagat 120
 tggcttaagc ttaggggtgtc tgcacctcca aatcgttctt ggatcaaaact acgttgatgat 180
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<210> 1267
 <211> 390
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-029-Q1-E1-B2

 <400> 1267

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 tccttgacat cttcgtctgc atcctcgctt tcatgccgac tggatggggc ctgcttctga 180
 ttgctcaggc gatgaagcct gtcgtcgaaa tggccgggtt gtgggggtcg gtgaaggctc 240
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 cgtgggtccc cattgtgtcc gagttccata ccaggatgct tttcaacgag gcgttcagca 360
 taggcctgca gatctcccgat atcctcggcg 390

<210> 1268
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-B3
 <400> 1268

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 gatgatgggtg cccgagagaa gtcggggaat gagaaaagga tgttgctgtc atggctcgctg 180
 aaacgacttg ccgtggacgc agtcacgcac tggatgccat cgacgactag ccgtggacaa 240
 gcacctcgcc gcctccgcaa aatatggatg cacgggattc tggactaac attgtggagt 300
 gtgtgctatt tcgggtgttg gacttataca ctctgtggaa gaaacccccg gcttgattta 360
 caggatgatgc tgatttgtct gggatctact tccgatagat taatttggtt t 411

<210> 1269
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-B6
 <400> 1269

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 ttgcgggttg atcgtcgggtc tagttgctgg tcttagagtc tagtctttta gagtttcgag 180
 ttctgggtcat aagttgtcac gccgccgccg caccatcatc atcgccctgc catctaccac 240

caccgctccg aattcgtatc catataccac caccaatccg tgcccatata ccaccaccga 300
 tccatatcca tatactacca ccgctaccac caccgctgcc atataccacc accatatatc 360
 caccaccaat ccgagttcct tgcttattag gtttgttttc gggatccatc tagattccgg 420
 ttcgtgttt 429

<210> 1270
 <211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-B7

<400> 1270

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 actactctac tatacgaatc cggtttacta ctcagagtca tacggattag tgtcaaagtt 180
 tgcacgcagc taacccttta cgacgaactc ttttaccacc tccataatcg agaaaattcc 240
 ttagtccact agatactacg gacaagttcg accgctgtca tgtgatccat tcccggatca 300
 ctattgtacc ccttgactaa ctcattggca ggcacacttc aggtgcggta cacagcatag 360
 catattgtag agcctacgtc taaagcatag gggacgacct tcgtcctttc tctctct 417

<210> 1271
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-B8

<400> 1271

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 tttgacagat tctgtttttc gtgtgttgtt tgcttatttt gatgaatcta tggctagtaa 180
 aatagtttat aaaccataga gaagttggaa tagagtatgt ttaacacgaa tatatataga 240
 aaatgagttc attacagtac cttaaagtgg tgttttggtt tctttcgcaa acggagctca 300
 cgagattttc tgtaagttt tgtgttgtga agttttcaag ttttgggtga aagatttgat 360

ggattatgga acaaggagtg gcaagagcct aatcttgggg atgcccattgg caccccaata 420
 taatctaagg acacctaataa g 441

<210> 1272
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-C5
 <400> 1272

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 gtctcagggtg gagctgccat cgtctgcttg cacttgccgg tggagctcga tgggtgcgtcc 180
 tcgacggtag cacagcactc cgaagagggtg cgcttgccgg agtgggcatc agagctcttg 240
 ccggactttg tttttttctt ccgcccggga gcttcagcgg caagtatggt gtgatcagct 300
 gcggctgctg cttcccggtg gatcttgctg gcgcagataa gggcatcttt cttgtcgccg 360
 gggacagaga tgacatttat cgggcctggc atcttgagca tgttg 405

<210> 1273
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-C6
 <400> 1273

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 tggggcggtg tatgccgtgc cagtaacaac aacgtcatca tccttggcgg ggcttgacgg 180
 gttgatattc tccttagcag ggcttggcgc tttggcagta gggctcggcg gcttgggtacc 240
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 tatcttcggt tcagcctttg gcggattagc atcagcacct ggattttcca gagtagagtg 360
 gtctgtggca gtctcaggat tttcgccctc atcttcaagg ctcttctccg aatcaacttc 420
 at 422

<210> 1274
 <211> 404
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-029-Q1-E1-C7

 <400> 1274

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gatacgcccc tgccaacagc ggacgttcaa cctgtcggag tgtgctccgg cacatcacca 120
tcccttgagc aagctcctcg atcctactta cgaagacccc tccaacgtgt cgttcaatgg 180
caccaaagct ctcgcaaccg cgactgacaa tcccggattc agcctgcagc gtcaagccag 240
tgaagtaagc aatttcaccc ttacgagac gcatgtagct caaagtttga atccatgcat 300
gatctaaact cccccacctt agccaggcct ggcacatgaa gtccaggtag gttaactgtc 360
cggtccccgt agcagacgac ccacagacg cccgattgac gggg 404
  
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<210> 1275
 <211> 455
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-029-Q1-E1-C8

 <400> 1275

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gtgaaattga gaaataacttg tgttgaagtt tgcaagtccc gtagcatgca cgtatggtaa 180
ccgttgtgta acaaatttga aacatgaagt gttctttgag tgatcatcctt tgtgtggagg 240
tcgggatcgc gggatggtta actcctacca acccttcccc taggagcatg cgtgtagtgc 300
ttggttttga tgactttagt atttttgcaa taagtatgtg agttctttat gactaatatt 360
gagtccatgg attatagcga ctcttaccct tccatcattg ctagecctctt cggtagccgtg 420
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<210> 1276
 <211> 391

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-D1
 <400> 1276

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 tacctacggg attagtttta aacctcaata attgttattt agtgccagct ttgagcatga 120
 acattgtatc tggatctcgt ttaattcgag atggctactc atttaaacc gagaataatg 180
 gttgttctat ttatatgaga gatatgtttt atggctatgc cccgctggtc aatggtttat 240
 tattgatgaa tctcgaacgt gatgttacac atattcatag tgtgaatacc aaaagatgta 300
 aagttgataa tgatagtccc acatacttgt ggcactgccg ccttggtcac attggtgtca 360
 agcgcatgaa gaagctccat gcagatggac t 391

<210> 1277
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-D3
 <400> 1277

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 gggcgtgaca gtttagttga tttggatcac gtgatcactt agattattag agggatatct 180
 atctaagtgg gagttcttaa gtaatatgat taattgaact ttaatttatc atgaacttag 240
 ccctgatagt attttgcaaa taatgttgta gatcaatagc tcgcgttggt gcttcctgt 300
 gttttatatg tgttcctaga gaaaactaag ttgaaagatg atagtggcaa tgatacgaac 360
 tggacccatg atctgaggtt tctctcatt gctgcataga agaattatgt ccttgatgc 419

<210> 1278
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-D7
 <400> 1278

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 tcaaagaaga tagcgctttt ttcttgggtcc ggaaactcaa gcctgcaaag catgtattct 180
 atatgaaaac atctaaattt tgagtgtcaa atcttcaagc agtcaattgc cttgaagcac 240
 attatagagc agaaattcat ttgaaataaa ataattatct atatatgcat gctcttgaat 300
 aacctttttt gcatctaate atcatggatg atatcgtaca acccaaccac ccaaatacca 360
 ttactcttga tgcagacata agctaaatag ctaacttttt tt 402

<210> 1279
 <211> 360
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-D8
 <400> 1279

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 aggactcagt cgagagctta tatatgagaa ataatgagac acatacgacc atatgtatgc 180
 gtgttatatg ataactataa acattgggtt tcccgaatct caatatgggtc tgtttccttt 240
 gcaaagtgct tttcttcgat tgtagagaga taacatagaa tttcacatag actgcaatca 300
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<210> 1280
 <211> 409
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-D9
 <400> 1280

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 agaaatctat tcaagcctta agaccagaag caagttaaat cttctcgttg gatgaacatc 180
 tggctgaccc tacaattaaa atggaactag caatgttatc aatttttttt acagcgggctt 240

gaagttttga ccaacatgtg cgtgatatta ttgactatgc aatttactta agtagcatta 300
gttcctagaa caatgatctc tggatgcatg tatcaaagcc tccagagaag ccttacatca 360
agcaaatctt tgaggatttt tggatgtct ccaaggaaat gggcaattc 409

<210> 1281
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-E2

<400> 1281

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gaactgaacc gatggagcta ccatggaacc ctctggccat ctgatgtgtg tgtataagta 180
gtgctgacac tgcagccgt ttcctgagga aatttgttgg gtcgttgaaa ttgagttgta 240
gttgactac tttgagctgt agctgtagcc ctaaatacata ttgtgtcgaa ctgaagatgt 300
acccagtaa gttcattcat gaatgcaaca ttttgcggt ctgcagctga gcagagtaa 360
tgcctagg 368

<210> 1282
<211> 426
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-E3

<400> 1282

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tgtttgcta taacatgcct atgcatagga agtatgtag acttagatgt gtttttcaca 180
tgtttcatga tgctctcttt gtgtttcaat tattatcttt catgtgagca tegttaa 240
tttatgccag ctaggggcgt taaacgatag cgcttggttg gaggcaaccc aattttactt 300
ttgttttgt tttctgcttt ttgattctgt ttagtaataa ataattcatc tagcctctgt 360
ttagatgtgg ttttatgctt ttaattagt tttgtgcaa gtagaacctt tgggaagact 420

tgggga

426

<210> 1283
<211> 443
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-029-Q1-E1-E6
<400> 1283

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gtcctaatac agtcttcaag tcacggagcg tcttcgattt tcctgagcta ttcttcatac 360
atcagtcatt ggttttgaaa actgggttta caagtcattc cgtatccaat ttcttgatag 420
tctaattgta cccgaggagt ttt 443

<210> 1284
<211> 395
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-029-Q1-E1-E7
<400> 1284

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agtctcggc aaggtcaaag gagcgcaaga tgaggtagat tcaagaactc gagcataagg 180
tacaggtctt gcagacagag gcgactacgc tttcagcaca gttgacaatg atgcagaggg 240
actctggagg acttgcgact cagaacaatg agttgaaaat aaggctgcaa gcaatggagc 300
aacaggcaca gctgagagat gctctgaatg aagcactgac gggtgaggtc cagcgggctga 360
aacttgcaac cggtagagatt aaggatgctc gtagg 395

<210> 1285
 <211> 309
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-E8

<400> 1285

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 acgatcgtgg cggcggccga agtgatcgcc atgtactaaa gatttctagc gacggatggg 180
 ttcagtgtgt ctttgtcagc ggaggttttg cggctctgtc gtgtctcaac gtgagggggc 240
 aatgtgaagt attatgaagc agcacatgta actgcagctt ttatgatgct aaacacatag 300
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<210> 1286
 <211> 397
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-F5

<400> 1286

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 taaagtgcac caaggccatt atagagaggc tgatacagag ggaaggccat cttgtagtca 180
 tagatgaagg aacagcggca gcagaagggtg ctacggcaag ggcacggag cacagaatcc 240
 tggctgttaa cccaaactac gtcattgatt gattaaccag ctgagggtcac acagctaact 300
 agatccatca tatgtggttg accaatatag cagacattca aacggaagac atcctgttgt 360
 catgctctag aatgatatg ttgcacctgc catcccc 397

<210> 1287
 <211> 437
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-F6

<400> 1287

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cgtgacgccg gcggcctcca tccaaccggg ggtgccggat agcttgatgg aggagctcat 180
cggcacttgc atcaaagagg aacaccgcac cgtcatgagt gtggtgattc agaaggttca 240
gctcgccaag agcgggctga ccgaagcctg catcagcctt ttaacaggct ttgaggtaag 300
aattttgata tatgtaaaat agtaccgcat agacagtagc cgccgatgct cggttcggtg 360
ttcggaaaga aaagccggac taaggatcta aaaagatata cgcaggagtc ataaaaaata 420
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<210> 1288
<211> 416
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-029-Q1-E1-F8
<400> 1288

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acggtgatga tgatggtgat gatgatgaga agcctccatc aaagcgatag tcaatttggt 300
cttgctgatc tggatatctt tctgcttggg ccaagaagga aaataatcct cacggagagg 360
gttggttgta aatgctgtag ctttaggaca tctgtggtag gtgtaacagc tcgaac 416

<210> 1289
<211> 421
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-029-Q1-E1-G1
<400> 1289

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 gtgcggatcg aggagatcaa gatgtcaggt ggaagcaccg aagaaactga tcaacaacag 240
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 t 421

<210> 1290
 <211> 433
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-G6
 <400> 1290

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 catatacacc caccatactc ctttctcaa aacagccacc atacctacct attatggcat 180
 ttccatagcc attccgagat atattgccat gcaactttcc accatttcgt tcatatgaca 240
 cgcattactt ttgtcatatt gctttttgca tgatcatgta gttgacattg tatttgtggc 300
 aatgccacct tcataatttt cacacatgtc gctcttgatt cattgcatat cccggtacac 360
 caccggaggc attcatatag agtcatatct tgttctagct ttgagttgta aaaccataaa 420
 agtgtgatga tct 433

<210> 1291
 <211> 417
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-029-Q1-E1-G7
 <400> 1291

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ggtgaggaga atggcgagga tgatgaggaa gaacaagagg agcaggaggg tggaggaggt 180
 gacgacgatg atgatgacga cgacaacgac gatgacaatg aggacgacga cgatgatgac 240
 gatgatgtcg ctgctgaaga cgatggagat ggagtagaag aggaggatga tgacgatgag 300
 gaggaggagg acgatgagga cttgctccag cccccgaaga agaggaagaa gtgaagccct 360
 tcgacgcggc tgcttttagtc accatgacgac gagatgtgcc tgtccttcac tgtgttc 417

<210> 1292
 <211> 376
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-H5

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 ttcaatgagt ttaacacatc gcctagaggt gagtgtctga agatgtccac ggagctgaac 180
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 gccgagacga gtccgaggtt ccggtaacac aagcccagct tgatgttggg tctttgtgcg 300
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 acgcgatctg ctccag 376

<210> 1293
 <211> 242
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-029-Q1-E1-H8

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 gcatcaatgg ctaccgccgg gtcggcacgc tctgtggaca gagttgcgct ccaaaaccac 180
 gatgtcgagg acgacacggt caacgacacc ttcaacacca ccgactacat gacctacatg 240
 tc 242

<210> 1294
 <211> 391
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-A4

<400> 1294

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 agctacaaag acttgatggt ccaatgcaat catctgggaa gatcagaaaag tcgcgctcag 180
 cagaggattg agaaggacaa agagctgata aagaagttga gggcaaagggt acttgatctt 240
 cagaaggaac tggaagaaaa ggaaaataat gtcatcagag acttgagggtc ttcaaagaaa 300
 tttaaagctg accagaacca gacaaatcca gtgaatgcc aatgctaataa tggtttctct 360
 agtccaagtg ctggatatgg gaatcaaca g 391

<210> 1295
 <211> 408
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-A6

<400> 1295

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 cacaagtcca tgtgctacag cctccatgtc catgtcctcc ctttcttcag gttctacagg 180
 ggagcccagg gcagggtcag cagcttcagc tgcacaaatg caaccatcaa gaagttcaag 240
 gacgccctcg caaagcactc gccggacagg tgcagcctcg gcccggcgcg ggggctcgag 300
 gaggcggagc tcttggtctt ggcggcaaac agggacctgg aattcaccta caacgagaag 360
 ccgacgctgg tgccgatcgc cgaagctatc cagatggaag ctgcctcc 408

<210> 1296
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-A8

<400> 1296

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ttccttagaa cgattggtgc aattattgat atgaaggaag gaaatattag attccaattt 120
ccattaagga aaggcatgga atactttcgt agaaaaatat taaattacct tatgaatcta 180
ttatgagagc cacttatgga ttgcctacca aagatggcaa tacctagatc tattcttgct 240
tgttatgcct agctaggggc gttaaacgat agcgcttggt gggaggcaac ccaattttat 300
ttttattcct tgctttttgc tcctgttttag taataaataa tttatctagc ctatattttg 360
gttgtgtttt ttgtgtttta ttagtgtttg tgccaagtag aaccgttgga aagacttggg 420
gaa 423

<210> 1297

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-B1

<400> 1297

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acagtccggt ttccggctttc tctactgagg tgctcgtctg gatgaaccag ggagcgggaa 180
gtaaggcagc aaaacacagg agccgggcaa acctaacatt tgaccaaaga catgatttgg 240
agctgatgca tataaggcca aactcgcgac gccgaacact ccctaaggta ttcgggtcttt 300
atggtgtaaa ctgggtctaa atagtaccct ttgtaataag cccctggtgt ccagggtacgt 360
gcattattct ggcgtggcca catgccaaga cgtcagcatc cttctc 406

<210> 1298

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-B2

<400> 1298

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 cagtattttt tccattgaac tgcccagggg gaatgagctt ttatgctggt tgtgttgtgc 180
 acgggtgaga cgtttggtgt ggatatttac cgtaggcacg gttttgtatc aggtggcggtg 240
 gtgattgtgc tgggtgtggga tggatgggtt gggagtttgg gacgggtcatg ttagcgtgtt 300
 attcttatta tgggtctctag ctatatgcag tcgaaggaca ccctaagact gtaattatat 360
 ttgaactcgt aatagagcct tttattatta ttttttgtgc catc 404

<210> 1299
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-B3
 <400> 1299

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 gaggttgctg tctcatgttg ctgtggagat cgagggtgtt tatgttcacg ttgggtgtgct 180
 tccgcagttt ctacgtcttg gtgtgtcaca catgtggatg cttctgtatc aactcttgggt 240
 tcaacttgtc ctgagggtaca accttacact tggactgacg aggtactctc attcaactcc 300
 gattgaccaa tcatgccata ttacactctt ggattgcttc cgaacgatct ttatctcata 360
 gatcacttgg taagtgtctt acttgccatc cattacgttc atcaagcttc agaattaccg 420
 tttcgtcaac ctttcg 436

<210> 1300
 <211> 369
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-B4
 <400> 1300

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atgggttgca tgataatgtt aacaaggagc tcatgcattc ggagttttgt ccttgttcag 180
 aaatgcccc tagtttaact agttaatcct actgatactt ttatgaatcg aagcattttg 240
 taattccgtt gcccttcgct gtttctctgt gtctgcaatg aagatatatg agaatgcttc 300
 tttcagggat ataattttca ccccttttta caaaaaaag aaaaaaggat aaaaaaaaaa 360
 aaaataaaa 369

<210> 1301
 <211> 408
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-B5

<400> 1301
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 tcgagccatc ttcgctgtcg aagggtcatg tcaggctgag tgaatatata cttgagactt 120
 ttatggtcgg tgaatatctg gcacttcttt ccaatcagat aatgtctcca gattttcaaa 180
 gcgtgcacca ctgcggccaa ttccaaatca tgagtaggat tgtttccttc atgttgctgc 240
 agttggcgag atgcataagc caccactttg ccactctgca agagtacaca cccagtcct 300
 tttctggagg cgtcgcagta aacatcgaaa ctgcggtaga tatctggaag agttaatacg 360
 gctgccgatg tcagtctggt ttttaactca ttgaagctcc gttcgag 408

<210> 1302
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-B6

<400> 1302
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 gggtttcagg acaaccagtc acagatgagc atggacgcct tcagattata aagaatgatg 120
 acctcgaaga gctccaagaa ctcggttctg gaacttttgg aactgtatat catgggaaat 180
 ggaggggctc tgatgttgca ataaaaagaa tcaatgacag atgttttgct gggaagccat 240
 ctgagcaaga aaaaatgcgg aatgacttct ggaatgaagc atctaaccctt gctgatctgc 300

accaccccaa tgttgtggcc ttttatggcg ttgttctaga tgggcctggg ggatccattg 360
caacggttac agaatacatg gttaatggct cacttaggac ggctttgctg aaaaa 415

<210> 1303
<211> 415
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-B8
<400> 1303

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aaacgcccac tgetccggga tgttccactg ccggtgcccg caaggcttaa ctgggatcgc 180
ctcctcataa atgatgacct cggtatttc cgggacgtaa ctatcagccg aaacaaagac 240
tcgatcaagt atgttgagtt ggaattccgg tcaatagaag tgctcaacct cgccaccacc 300
cctgtttcct acaccgactg ggtggcggtg aagaattcct caaggaaatc tcttcatgtc 360
atccgcgatg gctggaagtc cacaacatgg agcatggcaa taccggttg tttgc 415

<210> 1304
<211> 369
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-C10
<400> 1304

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cgtgccatcg tcgttcgagg acgtgtatgg cgggacactc ttcgaggaga gtatgaccat 120
cctcgactct gagagttaa agtcattcaa tgatgcttta tctgcgcatg accatatggg 180
aatcggcaca ttattgcggg aatgccatgg cttactcaat ggcttgcagt cacgcacga 240
cagtcgaggt ggtgatggaa tgagatctag ggccaatgta tacgccttcc ctcaaataat 300
atgcacgtg ttggaccctt caaagagtat caataaagct ccaagcgatg gcctcgtaa 360
cgatatctc 369

<210> 1305

<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-C2

<400> 1305

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aaggcatgtc ggcaactcgg catagacgga cgggcaatca gtttcattag atcgggtgca 120
aaaagaattg tgtgagagag atgcgcttgg caagtaagca tgtcaatggc gcaggaccgg 180
tcaaaatgtg ccacatcagc gaaatacatt ggatacggta gggcttgacc gtagagtgc 240
acatttctgc gacctcaatg accatatttt aacacttttg aattacgggtg atgaaagtga 300
accctagagt caagttcagg tactaaagat gtaatttact cgatataatt tgggtctcatc 360
caacttttat agccattgga tgtgatgcta taagatgcat gtgtg 405

<210> 1306
<211> 243
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-C3

<400> 1306

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gggacgatca atgatcgaag aatatcaatc tatcgataca ccgtggctta caacctggtc 120
agaattattc cgtatatgaa gttgaatcag atcatgtgga ttacaaaat ttgagcgaga 180
atgtgttgca tgtttagaat atgatccctt accctgcatt gaatcaattc gttgcgatct 240
att 243

<210> 1307
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-C4

<400> 1307

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atcacagaaa ctacacctag tagatcctgt ccagttgcgc ttaatcaaat taccctttgt 120
 taaaattact tgtttatgca caaaccacat aaacacttta atcttcaaag ggactttgac 180
 tttccaaaca tgtttggaac tcggaataac actagagttg atgacattga tatacatcga 240
 cttgaccgtg aagtctccag acctagtaag cttccaacgc aactgatcag gctgatgagt 300
 tagctgaacc tccatcagtc tactcactag atgaagccat gtttcccacc ggtcaccaac 360
 aagcaccctc cgaaattgaa tattaagagg gattgaggga gtccctggatt aaggggtgtt 420
 ccgatatccg gact 434

<210> 1308
 <211> 353
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-030-Q1-E1-C5
 <400> 1308

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 ttcacagcga gctatgactt cgaccatgtc gatgttaacg tcagtcgaaa gcgcaaagac 180
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 ctccaagaac taatgtttga cctcgagggt gttttcttgg caaccaatga cctgacgaca 300
 actccgacat tatcaggacg agcataactca ctcacaccag acatgacggg gac 353

<210> 1309
 <211> 415
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-030-Q1-E1-C7
 <400> 1309

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 aactagtaca aggatgaaca agcctgagga ggtgagggtg tcttgagctg gtgtggtgct 180
 ctgcttggtc tgattccggt cctcttctat ggtggtggct aagtcctata tatagtggcc 240

ttggtcctct tcccaatat gagagggaag ggattccaca acggcgggat ttgaaaggtc 300
acaagtagta cagtctatcc tgacaaaagt agtcttcgcc tacgaaaagc ctctggtcgt 360
gacgctgcgg tgggctcggt gatgacctcc gtctgtcgt cctggcggtc ttggt 415

<210> 1310
<211> 409
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-D1
<400> 1310

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cgtccaagga gggcggcgag aagaagggga agaagaagtc caagaagagc gtggagacgt 120
acaagatcta catcttcaag gtgctgaagc aggtgcaccc ggacatcggc atctcctcca 180
aggccatgtc catcatgaac tccttcatca acgacatttt cgagaagctc gccggcgagt 240
cggccaagct tgcgaggtag aacaagaagc ccaccatcac gtcccgggag atccagacct 300
ccgtccgct cgctctcccc ggcgagctcg ccaagcatgc cgtctccgag ggcaccaagg 360
ccgtcaccaa gttcacctcc gctgattcg gtctgtccc tgtgtgtgt 409

<210> 1311
<211> 374
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-D4
<400> 1311

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catccaaacc ccgtgatatg atacgtctta tcacacataa acctccttat atcttctca 120
aaacagccac catacctacc tattatggca ttccatagc tattccgaga tatattgcc 180
tgcaactttc caccgttccg ttcacatca tcatgacata cattactttt gacatactcc 240
cattgcatga tcatgtagtt gacatcgtat ttgtggcaaa gccaccatgc ataatttttc 300
atacatgtca ctcttgattc attgcacat cccggtacac cgccggaggc attcatatag 360
agtcatatct tgtg 374

<210> 1312
 <211> 431
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-D5

<400> 1312

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 gttgatgctt tgaaacttag atctatccca cctaagcatg atatcaatga gtctctaaaa 180
 gccatgagaa tttcaattga tgagtgtaaa gaaagaaccg ctatgatgcg tgcttcaaaa 240
 gatgccttta ttaaagcgtg ttcttccaat tcctatgaaa atcaagatga agatctaaaa 300
 tttattgatg tgtctccaat taaatcttta ttttgcaata tgaatcttga cgaaactgaa 360
 tatgatcttc ctttacctag aaggcgttct aaaaattcgg agtattttaga tcttaatgat 420
 gaaattgatg a 431

<210> 1313
 <211> 306
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-D6

<400> 1313

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 ggtactgttc aaggatgcta ctcacgcacc accattacct aaggttgttg cgttggctaa 180
 agttaacgtg gatgaattgc catcgaacct acaggtggaa tcgtttcttg aatgcagccc 240
 ccctagtctc gggtttcctt gcaaggctcc caataattct tatcaacaag ttaagggtcaa 300
 gggttt 306

<210> 1314
 <211> 400
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-D7

<400> 1314

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gcagaggaac ggggtcatgg cggcgtctcg atgcgcgtgg gtggagatag ggtcggcgac 180
gagcttgcta cgccggagga aagcttgagc acgagccggc catggcgtcg ggcggagggtg 240
atggggcgag gtggagctac ccttacctgg ctggtggcgc ggaggaggaa gggaggagga 300
aggggaaacc ctagggaggg ggcgctggtt aaaaaggacg ggcgtgggcg ccgtggtagc 360
cacggtggcc atgtgccctt gaatattact gtgagtggag 400

<210> 1315

<211> 143

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-E11

<400> 1315

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tgaagggttc gagttggagc acgcctgtcg ggaccgaaag ttgtgaacta tcctgacggg 120
caaccagagg aacctgtgag ctc 143

<210> 1316

<211> 426

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-E2

<400> 1316

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ttgccagtac aaactccttg gttcaactcc acaatcttga gagatgctcc caagtgatac 180
ctaagcaata taggagacac cactctccaa aaggtaatat atgggtgtgtt gatgatgaac 240
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ggatttggtg gaaagatgat ttgagtggaa agcatcttgg tgaaggctag agatcaagat 360
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 aaatta. 426

<210> 1317
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-E3
 <400> 1317

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 ttggtgctcc attattcatg gagacgccac actcttggtc aatgtacgct gaaaaggatg 120
 atcactgttt tgacgaggat gttattcctt gtgagatgga tgatgacgat gacatcgtct 180
 ttgaacatag tggatcgag tctgacagga aaacatcagg atctatggct tcatccgatg 240
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 ttccagtctc caccaatcct gtgtcctatg accaaatgaa gagccaatgt gaatccctag 360
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<210> 1318
 <211> 400
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-E4
 <400> 1318

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 cgactatgt gggagcgcta ctgtcgtgga gttactgcta ttttatacgt tgtcgatgct 300
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 tctttatctg ggatcccctt acttatccct ggcaacaaaa 400

<210> 1319
 <211> 365
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-E5

<400> 1319

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 agcgagccac ttatcctctc agccaccaca tcggaatcac ttgtgggtac tctacgagcc 180
 gaccctacct tattcaccac atgtatcata taccatgtat gtcattacgt ccccgatgac 240
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 actgattgtg acactatcat cctatactaa gcatttaaga ttgtaggtaa aggtaacaac 360
 atcta 365

<210> 1320
 <211> 405
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-E6

<400> 1320

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 ggtcaccgcc gctgcccgt gcgcgaagca tcagcaggtc acctccgcct cctcgcaaca 180
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<210> 1321
 <211> 372
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-E8

<400> 1321

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cccttttggc ttatggtaag taagggactt ttgttgtagt ctttgagtag cttcatgcc 180
tgcccttgctt tgccatgata tgttcatata gcatgttggt atcatgctct aaacattgca 240
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<210> 1322

<211> 250

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-E9

<400> 1322

ggtccagaaa tccgggtcga cgggtctgaa aaagtggggc ggtgggtgtca tgggctccaa 60
gtcgcatgcc atgaccaaag ccacggaaag gtcctatgcc aatgatgctg cgcataggat 120
gaactaagcc tagccttata tgtcagagca tatgccatgt aatttccctt tcagtgtgtc 180
atgattttga cgaagaactc gaaccctttt agcatcactg tggaatcgta ttgtgggttt 240
ctgattctta 250

<210> 1323

<211> 377

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-F1

<400> 1323

ggtctagaat acccggtcgc acgggggctc ccaatgtccg ggaaggctct gattaccaac 60
ttgtaatgcc ctcgatacgg ctatatcgcc tacgtgtcga gccatgaactt acatgcataa 120
ccacattcaa agcattgtcg caagtaaggc actcttcaga acatcccatg tttatagata 180

ctacaagga aggtacatag ttggcttaca ctgccatat cacacatagt acatatatag 240
cattacatca accaatcaat catggcacga ctaccgtgcc aaactaagag atcaacccaa 300
catgcgacac agtccccgac gctccaactg ggcaccacta ctgatcatca gggaaagaca 360
cataactaact gcgtgag 377

<210> 1324
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-F2
<400> 1324

ggctctagaat acccgggtcg acgggtccac ccattcgtct tcgtgcattg gtaactttac 60
ttggagctat atttgtattt gctacatgag atgtgttttg cttggatcgt cgtacactat 120
actagtcatt gccttttagt ttatcacaat catccttgct gtgcacacct ttttgggaga 180
agcctacttg gttcgaattt gctagaatac gtctatgtgc gtcacgttag atcttttgag 240
cttgatagtt tttgctctat tgcttcactt atatctttca gagcacggtg gtgtcataat 300
tttgaataaa ttgctaattc gtcatgcttc acttatataa ttgtgagagt ctttttagacc 360
aacatgggtga ttgctatggc cataaagttg gtcctagatt gatgagcatc ccagttgggt 420
ataatgttgg ctatctta 438

<210> 1325
<211> 407
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-F3
<400> 1325

gggtcgacgg ggaagaccac cgcaggcaag aagcccaagg ccgagaagcg gctgccggcg 60
ggcaagacgg cgtccaagga ggccggcggc gagggcaaga cccggggccg caagaagggc 120
agcaaggcga agaagggcgt ggagacgtac aagatctaca tcttcaaggt gctgaagcag 180
gtgcaccctg acatcggcat ctctccaag gccatgtcca tcatgaactc cttcatcaac 240
gacatcttcg agaagctcgc cggggagtcc gccaaagtgg cccgctacaa caagaagccc 300

accatcacct cccgggagat ccagacctcc gtccgcctcg tcctccccgg ggagctcgcc 360
aagcacgccg tctccgatgg caccaaggcc gtcaacaaat tcaactc 407

<210> 1326
<211> 289
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-F5

<400> 1326

acgccgccag gtaccagtca ggaattcccc ggctcgacggg gaccacaaca aggccgcgga 60
ccacaatacc aaggacggcg aacacaccaa ggacagctag cacactgacg gcacgccgga 120
gaacatcaac gacaagatca gcgggccacgg ccacagcgac cgcaccaacg acagcgacaa 180
aacaacaaac cacaaaaaac acagaaaacc tgccgctcca caggatccaa ccttacgtac 240
tcctactacc gacgtcataa cacttctata ctgtcaccta atgtccatt 289

<210> 1327
<211> 407
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-F6

<400> 1327

aagtccccgg tcgacctcta tatataaagg gatgacccgg cggcggttta gggcaagtaa 60
catcggatcg agagctaggt caagcgattt cgctccctgg taatcgagac ataagcaatc 120
ccactcaaaa ctggatcgta ggcttttacc ttactgcaa ggggccgaac cagtataaac 180
cccggtgctt ttgtcccgat taaccctttt aagcttccta gttgcgatgg ctccacgact 240
aagtccttcc actaggacat ctgacatgac aattccatga tagttggcgc ccaccgtggg 300
gctagcgcac ggtggatttg agttcttgaa gggcagcttt gaagggtca agagatacgc 360
tatgggccgg atgaccaaga gtcacgcgg caagctctac atcaacg 407

<210> 1328
<211> 427
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-F7

<400> 1328

aattcccggg tcgacgggga gcggtacacg gtgccgtcgc tggcggcgct ggagcacaac 60
ctggaggcgg ccatgcacag ggtgcgctcc gagaaggacc gcaagatcgg cggcgagatg 120
agctacctcg agaacatgat cagggggaaa caagcggagc gctacggtct gtgtgacaag 180
ctcgctcatg ctcagagccc caaggctcgtt gaaggtggat ccacctcgct gaacaacggc 240
ctggacctca aacttggatt caactaggaa cgggtgaaag cttctggccg tggggttctg 300
ctctagtgtt gcttttgagc tcgagtgtta tgtcagggtg aaatattcta caatttcctt 360
cgaagggatt gtatgaactt gtaagagacc actgtcttat gagatgtttg gcttaggctg 420
gactggg 427

<210> 1329

<211> 415

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-F9

<400> 1329

ggtccagaat tcccgggtcg acgggaggct gctcgactc atcaaatcga gcctcgacat 60
agttgttgcg gtggggctcc tgcaacttgc cccgaaaaag gtcactctc gcgtcacagg 120
ggcctttggg ttcgctagct cgctcatcgc ctgttaccag ttgcttccag ccccatccaa 180
atccaagtga tctgcctgcc cacctcgggc caggcagctg gtgcatcgat tggtgaaact 240
gcggtcgctg ttgctgatac ttgataagaa ttaaactctg accaaattgt ccgtcctgta 300
agatataacc gaggattact gttgtgcatg ctggcattgc ccagagccat ctcatagcct 360
ggttgatctg ccttgcccta gacgtgatca tgtagcacc ttgtatttgg atggt 415

<210> 1330

<211> 417

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-G1

<400> 1330

ggtctagaat acccggtcg acggggagggc tgacaagctc gcccgtaca acaagaagcc 60
 caccatcacc tccagggaga tccagatctc ctcccgtcc aagtcccaa ccccttccgg 120
 cggcgaagca acacaccctc ctttctcccc ctccgaagc agcgatggcc cccaaggcgg 180
 agaagaagcc ggcggcgaag aagcctgagg aggaggagcc cgcggcggag aaggccgaga 240
 agggccctgc tgggaagaag ccgagggccg agaagcgggt tccggcgggc aagaccgct 300
 ccaaggaggg cggcgagaag aggggcagga agaagggcaa gaagagcgtc gagacctaca 360
 agatctacat cttcaagggt ctgaagcagg tgcaccctga catcgggatc tcctcca 417

<210> 1331
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-030-Q1-E1-G10
 <400> 1331

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 aagctgaagg atgatctggc ggacgcatac ctgacgacca tgactcagcc caggaagaaa 120
 gaatcatcca tatcaaagct ctggaagtca tctcgcgcaa agaacagcga cgtctccaag 180
 aaggatgcc cggaggcact gaacggcaga tcatcgaatg tgccgctgtc ggtcgggacc 240
 aattccacca tcgagagcgg cgttcaggat atcggcctca gctcgccgag cgtggggcaa 300
 tggagctcgc cggactcgat gaacatccaa ttcaaccgag gcttcatggg ctgcatggag 360
 taccgcgggc gtcccagaat cacagcctga anggaaaact cat 403

<210> 1332
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-G2
 <400> 1332

gggctgacgg gtgaagagag tgacaacat ggataagtgt caaaacctcc aaacacagga 60
 gactctgatg ctgcgcaact cactgaggat gtacatgcaa agctggttga atagctcaga 120
 ccttgtgtag gtcttctact caatattctg tactcgattg tcaccgaacc tttcataatc 180

aacatgctga atcacaagac atattctgct cgctgattgc gatcgctgtc tcattctatga 240
tcaagtctta cacttggtgc taactactct acgatcagta tggtcgtata ttattagtgc 300
ttatattctt tgcattgggt cacataactg tcatactatc tcagaatcta ctactgacga 360
tcaatcggtg accagttaga catatgctgc ttgttatatc aa 402

<210> 1333
<211> 403
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-G3
<400> 1333

ggtcaagaat tccgggtcga cgcgatgaga aagctgcaac agccaataaa tgcgcagagg 60
gtgccacagt ccaagcgccg gatgagaaag ctatgacagc catggaggac tacatggcat 120
aggtggctga tgggcatgtg gtacaactga acataaaggc tagctagctc acggctaatt 180
cttgtttctg tctgtaccaa cgtaatcatt ctgccaacc ggttctcctc atcaggatgt 240
catgttttgt aaaggaacag actggagcct gtctgaccct agcatcgcat ccctgttagg 300
ttagctaagg cagtatcata tatttggcca ctttcacatc agtccatca atcatctacg 360
gtaatggtgt aaccctaaaa ttgagctgtt gcagaacttc cgt 403

<210> 1334
<211> 398
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-030-Q1-E1-G4
<400> 1334

gtcaagaatt acccgggtcg acggggaaga agcccaaagc ggagaagcgg gcgccggcgt 60
ccaaggaggc cggcggcgag gggaagcagc ggggcaggaa gaatggcagc aatgccaaca 120
aggcggtgga gacgtacaag atctacatct tcaacgtgct catgcagggtg cccccgacg 180
tgggcatctc ctccaacgcc atgtccatca tgaactcctt catcaacgac atcttcgaga 240
agctcgccga gcgagtcgc caagctggcg aggtacaata agaagccac catcacgtcc 300
cgggagatac agacctcgt ccgcctcgtc ctccccgtcg agctcgccaa gcacgccgtc 360

tccgagggca ccaacgccgt caccaaattc acctcatc

398

<210> 1335
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-G6

<400> 1335

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cgagtttga cggccgggga ccatcggaat ttgttggcag aggggtcctt ggatcgacgc 120
ccatgcgagg tcacaccagg cggatccagc gcctgcaagt cagtggccac gcgaggactc 180
cggatttgaa gctcgggccc cggcggcagg gcgtggaggc ttgcagcagt agcagttgtg 240
gcgcagtgga aagcgatggc gcttggggcg ccgacgagta acggatctcg tcggatttgg 300
ctcaggggag gcacaggacc aggaggacct cgccggatct agcttgtgta ggcgctggac 360
ccatggaggc gcggctagtc atcggaacg ccgtggggcc acgggggctg caccggagat 420
gaagagtacg gtgttcccgg ggg 443

<210> 1336
<211> 429
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-H1

<400> 1336

ggtctagaat taccgggtcg acgggaccaa gccaatgatg caaggcttct gttgttgctg 60
ctgcaagtct tcatcaactt agttgttcca caggagaga tataaatcct tacttgttc 120
actttgtaat ctgcagatta cttcttccat taatcaccta gtgctcctgt tagtgagatt 180
catctagtat tttttttgca aagcatgcaa tggctcggag tagttgatca tggcctgatg 240
gaacctctag ctgaacaata agataggta gttagtgtag tagaggaaga aagatgatat 300
atttattatt tgcttttgct gcttctatat acacatgtat gtatgtttag ttattcgaca 360
tgcttctgaa attgattgtg cttttagatc gaaacactat gcttgttcaa agagtgtcca 420
tgttgtgtg 429

<210> 1337
 <211> 290
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-H10

<400> 1337

gtcgtattac tatttcgggt acggtgagat cgagaagctg tccgatgatc tggcggacgc 60
 ataccttacg accatgactc aggccaagat gaaagagtca gcgatattaa agctctggaa 120
 gtcacactc ccaaagggga tcgacgtctc caagaaggat gccacggagg cactgaagtg 180
 cagatcattc aatgtgcagc tgtcgatcgg gaacaattcc accatctaga gcggcggttca 240
 tgatatcggc ctcagctcgc cgaaccttgg gcaattcagc tcgccagact 290

<210> 1338
 <211> 341
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-H3

<400> 1338

taccgggtcca gaattaacgg gtcgacgggg gattgccagt ttctcttcac atagaaaacc 60
 gccattgta gaatgatctt ttgcttcact tatatttggt agagcgtggg catatctttt 120
 gtagaaagaa ttaaactccc ttggctcact tatatttggt tagagagatg acatgagttg 180
 gtcattcaca tggttagtca tgaaactcta cataaacttg tagatcgctg aatatgatat 240
 gtttgaatcc ttgcaatagt cttccatac aaagatgggtg atattagagt catgctagtg 300
 ggtggttggt gattgtagag acacttgtgt tgaagtttgc a 341

<210> 1339
 <211> 455
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-030-Q1-E1-H5

<400> 1339

gccgccaggt acaggtcaag aattccccggg tcgacgggga agtcggccgc caaggagggc 60

ggcgacaaga agggcaagaa gaaggccaag aagagcgtgg agacgtacaa gatctacatc 120
 ttcaagggtgc tgaagcaggt gcaccccgac atcgggcatct cctccaaggc catgtccatc 180
 atgaactcct tcatcaacga catcttcgag aagctcgccg gcgaggccgc caagctggcg 240
 cggtagaaca agaagccaac catcacgtcc cgggagatcc agacctccgt ccgcctcgtc 300
 ctccccggcg agctcgccaa gcacgccgtc tccgagggca ccaaggctgt caccaagttc 360
 acctcctctt aggtgtttcg tcttctgtg tctcgtagtt agctgttcgg gtgtgtttgt 420
 ggccgtgtta tctgtgaaga atcgaccgc gatgt 455

<210> 1340
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-H6
 <400> 1340

ccgggtcgac ggggaagcggc acgtccaagt gccactagt ttcgatgaag gacacgtcat 60
 ttgcggtgtt ctggacaaag gaaggcgggg acgaagataa tcagacagtc cagctgcagc 120
 cggaagatct tgccactcag gaggagcagt taaatgaatt ggtggacaat caaatggaag 180
 agattgctga ggtcgccaag aacgttgccct cacgcggcaa ggataaattg gctgcttgat 240
 gacgtgagat cttgtagctc gttggtagaa agttagaaaa tttcttactg gagattatcc 300
 tcgacgtgga gaactatgca atgcggattt tttgtttcga gaatgttaca ttgttatact 360
 gtttcaactt agtaaccgta ccaacttatg ttatttgagt gaaaaacaaa t 411

<210> 1341
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-030-Q1-E1-H8
 <400> 1341

ccgggtcgac ggggctagcc tgccctccag gagcgccgag tccctccgtc cccaacggat 60
 ctacgcgcgc gaggttcggt tcggtcttcg gagctcgaga catggcggag gagaatgccc 120
 cagttgaggt tgctgctccg gttgcggccc ctacccagat tcttgagag cccatggact 180

tgatgactgc tctgcagctt gtgatgaaga agtcaagcgc tcatgatggc cttgtcaagg 240
gactccgtga agctgcgaaa gcgattgaga agcatgctgc tcagatctgt gtgcttgctg 300
aggactgcga ccagcctgat tacgtgaagc tggatgaaggc actgtgtgct gagcacaatg 360
ttcacttggg cactgtgcct agtgccaaga ctcttggcga gtggggct 407

<210> 1342
<211> 381
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-031-Q1-E1-B11

<400> 1342

agtacaggtc tagaattccc gggccgactg tgactgaaca gatcccgggc gccgcagtcc 60
acctatcaac tcaaccaagt cagtactcca cgacctcgca gacctcctaa cacatacacc 120
gcctctctcc gagccttggg caactcatta atgcacaaca tgcaattctc gcgcaacagc 180
gaatccacat ttaacttgat acaatcggtt ggcccatacc ctttcggcgt agagaatcat 240
tccgctcagg agaaacttca ttcaggggtg agacagtcag gacattgtcg tcatacgaag 300
tcgatattat accgagtgtc acttaccaa ccattactct cctgatgctg cagtgaagc 360
acttctctga ttactcacag g 381

<210> 1343
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-031-Q1-E1-B12

<400> 1343

gtaccagtca ggaattccc ggccgacggg gacccacagg atggcaggga aaggaggag 60
gctaataaat acgctaggca agaatggca gagattgact tcagtgaact ccgtctcctt 120
gatgctagac caaatctgcc acaggcga ttttttcctt acgttcctaa cgaggacgac 180
gctcttctag atgacattcc cagcgatgat gatgattttg aagaggagga tgctctgccc 240
atccaaggag aggacttcga aggggaagcc gccgccgccc ctcaacagct tgttcctcct 300
attcagtcca gctgagaaga tgattcagtt ggtctacctc tatctattct atccaattat 360

gttttagcaga tgtctctgtc gtggatccgt acatgtgggt tggtcgggtc tatctatct 419

<210> 1344

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-031-Q1-E1-C11

<400> 1344

ggtacaggtc aggaattccc gggccgacgg ggactgaatt ttacatctca ggaggttggt 60

accgtgctag ctatctcagg ttttggtggt ttggtatata aacttctgat ctacccgttc 120

cttgccaagt atgctgggct agtcaagcca ttccgttctg cagcgggtatt atctatactt 180

ctccttgcaa catatccatt catggctaac ctatatgggtg tggagctcaa agtactcatc 240

aacatagcct cgcttcttaa gaatatgttt gcggctacga ttactattgc ctgcaacatt 300

ctgcagaaca cagcgggtggc acaagaacaa aggggtgtcg caaatgggtat atctgtgact 360

ctgatgtcaa tcttcaaagc agtagcccca gcagcagcag gaattatggt ttcattgggtc 420

cagaaaaaca taactggatt gttcatac 448

<210> 1345

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-031-Q1-E1-C12

<400> 1345

gtaccagtct agaattcccc ggccgacggg atgcgccccg ctggcatgga cacgtgtcgg 60

agcagggtgg agcggcgacg gacgggacat gggtagtct ccgccccga taaagtaagg 120

gacacctaat ggggtgcatt aatgcacct tctctgttaa tggctagcga taagcttagc 180

cacgatacac cgatgccacc tctgtgtgc cactgtggca atccccttga ctataaaagg 240

aggcccgagg catccaggag aaggattcgg accctgggac aagttacatt catggtagct 300

agctcaagaa ctcaaagaac actcagatat aactaaagc aggactaggg tgttacgctt 360

ccttccggcc cggacctggg taaacgaccc gtgtgcttgt gctgattgct ggtcctgctc 420

tctcaacac cccgcgtcc gcaaccat 448

<210> 1346
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-031-Q1-E1-D11

<400> 1346

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 tatttataag gaaggactga cagagagggc gcgagaaacg aggaggccag gcatggatat 120
 ccagctactc tgacgcctcg atttttggga tggtcattaa gataaagatc cgttgagata 180
 tgacagaata aaatgaattt aatggaagat gacatcatgg cggggttatca tgaattcaga 240
 agatgacgtc atggcggggtt ataactttgc acagacaaaa gccagaaagt ttttcttaaa 300
 gtattgaaga ttgacatgaa cgggttcaaa tcaatctggg gcctaattgtt ggggatataa 360
 ctactgggtg aaccgcacca ggaggggctg ggttacgcta taacaattca ttatatgaag 420
 cccaatat 428

<210> 1347
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-031-Q1-E1-D12

<400> 1347

aggtaccagt ctagaattcc cgggtcgacg ggaagcaaac tgaggataaa tctgatgcgc 60
 caaaggaaga ttacattcat ataagagctc gaagtggcca ggctacaaac agccatagtc 120
 ttgcagaaag ggttcggagg gaaaagatta gtgaaaggat gaaatttctt caggaccttg 180
 ttcttggttg tagcaaagtc attggtaaag ccgttatgct ggatgagata atcaattatg 240
 ttcaatcatt acagcggcaa gttgagtttt tgtcgatgaa actttcagct gtcaaccacg 300
 cactagactt caacatagag cgcattctat ctaaggattt atttcagtct caaggaactg 360
 catcgtctac ctttggcttc ttaccagaca ttggccatca atttttgcat ccacaaaaac 420
 attctcaagc tgcgttgac agcattgta 449

<210> 1348
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-031-Q1-E1-E10

<400> 1348

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 ctacttacgt caaacataac tcaaaagccg tgttctcttc acggactccg ccgaaaagag 120
 accatcacgg ctacacacgc ggttgatgta ttttaattaa gtcaagtgtc aagttctcta 180
 cagccggaca ttaacaaatt cccatctgcc acataaccgc gggcacggct ctcgaaagtt 240
 tataccctgc aggggtgtcc caacttagcc cattataagc tctcatggtc aacgaaggat 300
 attccttctc ccgggaagac ccgatcagtt tcggaatccc ggttacaaga catttcgaga 360
 atggtaaaac aagtccagca agccaccccc tgtgccga 398

<210> 1349
 <211> 431
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-031-Q1-E1-E12

<400> 1349

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 gaggaggaac ctgccttgca atgccgaaga caacactgcg cgccggactc atcgtcattg 120
 aagcctgggt caggggctac tgaggggggtc ctggattagg gggatatccg acagccggat 180
 tatatccttt cgccggactg ttggactatg aagatacaag attgaagact tcgtcccggtg 240
 tccggatagg actctacctg gcgtggaagg taagctaggc aatacggata tgtatatctc 300
 ctcttgtaa ccgaccttgt gtaacccttg cccctcccg tgtctatata aaccagaggg 360
 ttttagtccg tangacaact gtcacacct agttaattca agcattagag tgtgcatcat 420
 gtttaaattt c 431

<210> 1350
 <211> 400
 <212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-031-Q1-E1-F11

<400> 1350

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atctaatacat ttggtatggt gagcagcaga atgcccaagg tgcataatagt tctacagaag 120
aggatgaagga ggaagtaaag tgcatacaaag ccattataga gaggtctgata cagaggggaag 180
gccatcttgt agtcataagac gaaggaacag cggcagcaga aggtgctgca gcaagggcat 240
cggagcacag aatcctgggt gttaaccga actacgtcat tgattgatta accagctgag 300
gacacagcta actagatcca tcatatgtgg ttgaccaata gagcagacat tcanacggaa 360
aacatcctgt tgcataatgc tctagaaatg atatgttgta 400

<210> 1351

<211> 417

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-031-Q1-E1-F12

<400> 1351

attcccgggc cgacgggtga gaggaagaaga gagaaggac aatgctacta tccttttacc 60
acacttgatgac ttcaaaatag caccatgatc ttcatgatag agagtctcca atgttgatcac 120
tttcatatac tagtgggaat ttttcattat agaacgtggc ttgtatatcc caatgatggg 180
cttcctcaaa atgccctagg tcttcgtgag caagcaagtt ggatgcacac tcaacttagtt 240
tcttttggtg agctttcata tatttataac tctagtgcac ccgttgcatg gcaatcccta 300
ctcactcaca ttgatatacta ttaatgggca tatccatagc ccgttgatat gcctagttga 360
tgtgagacta ttttctccgc ttttgtcttc tccacaacca ccattctatt ccacatg 417

<210> 1352

<211> 403

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-031-Q1-E1-F9

<400> 1352

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tcgcccccta ttactgtgca tatggttggtg caaaaggctct gctttgatga tggcacaatc 120
gattgcacac tttacaagct catgatttgt tattaccctt gttcctcttt ctatgcggct 180
gaaaagctag acctggacta gtgtatcatt atttgttttt gtagtaaaat aaaaggcgca 240
gttgtagcgt aaactaaata aatgatgttt attttcgtag tgggtggcac tatttggtgca 300
gtttgttggc aatgtaaaat gtacacccaa gatatcaaat ggtttgttgc caaaaaaaga 360
ggagaggagg aaaggggagg agaaaaaaaa agcggccgct cta 403

<210> 1353
<211> 449
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-031-Q1-E1-G10
<400> 1353

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gcctcggagg cagcgcatga agcgatttgg gtgaaggagt tcattaccga cctaggagtc 120
ataccaatg cgtcggggcc gatcaaactc ttctgtgaca aactgggagc tattgtcctc 180
gcgaaggagc ccaggtttca caagaagacc aggcacatca agcatcgttt caactccatc 240
cgtgaaaatg ttcaagatgg agacatagag atttgcaaag tgcacacgga tctgaatgtc 300
gcagatccgc tgactaaacc tctctcgcgt gcaaaacatg atcaacacca gaactctatg 360
ggtgttcgat tcatcacaat gtaactagat tggtgactct agtgcaagtg ggagactatt 420
ggaaatatgt cctagangca ataataaaa 449

<210> 1354
<211> 451
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-031-Q1-E1-G11
<400> 1354

gtaccagtcc agaattcccg ggccgacctt catcatgaga caccacgtgc atcatctact 60

tcacacattc tgctacaccg gcaactccat cggctgccac ctccaaccgt gatacaataa 120
 agcaggcaca atcaccacta tctgccaaga tcacaccttc tgggcctgca aagagttggt 180
 cttcatccat ggcataca gggcaaacac atgatattat ttgtcgatgt tgcaagggtg 240
 gagctcatta tgcgagagaa tgccaatcta agagtgtgat gattattatt gaggatgggtg 300
 ggtatgagtc cgctagtgc tatgatgagg agtctttggc tcttattaca catgaagaac 360
 acggtggaga tgattctgat cctgagacgc aatacatggc tgctgaagat gctgacaggt 420
 atgaatgttt agttgctcaa cttgttttga g 451

<210> 1355
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-031-Q1-E1-G12
 <400> 1355

ccccggccga cccatctggc atcgtaacac ctattcattt taacaaagcg cttcgtgggt 60
 agctcagttt ttaggaggtt ttctgtaaat atttttccat gaaaaaatgt ccaagaattt 120
 tctagcaaac atgaacttta acagaagttc atacattttg atcatcaaaa tgtgatctta 180
 aaacatgtac aatttttttt aaaagcaatt cttgtaaagc ttaaacttgt ttcaaaattt 240
 tgagaattac taaattcgaa aactgaattt gaattcaatt ttttcctgaa tttaaacatt 300
 gtttgacat tatagaagtg tatcaaacta agtacacac atattctagt tattttgcta 360
 attttgaaat attccaacac taagaaatgt tcactacgtt cttagaaatg ttcatt 415

<210> 1356
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-031-Q1-E1-H9
 <400> 1356

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 caagggagag tccccccggt cgtcacgccg cagtaataat gacgaatgag ccatcaaact 120
 acaggcccaa cttttccac tgtgaagttg ctcggacgaa ggaaccatca tgacttcggt 180

gaattccgct tcttgaagaa aactactgta ccaactgtcc tgctagctac agtagtactg 240
 tactccacca gaggcctcct ttggttcata ggataggaat tttataggaa tatgaaaatc 300
 ataggaagtg agatgacagg catctcaatt cctatagaga aagagatgcc atttgaatca 360
 taggatagga atttttccat tgagtctagg ctaatgtatt ggtaatttgc tctanaaact 420
 acaatagtaa ctagtactgg tacatg 446

<210> 1357
 <211> 394
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-031-Q1-E2-B8
 <400> 1357

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 ggcgctgcag ccggagccca tgcagaggct cgagaagggc gaggagttcc tgcaggtcgc 120
 ggctgcctga tcacctgcac gccgctgcct gcaatattta gtgagcttaa ttaagcaaag 180
 gtttgtgatt tagccacttt cgttgattcg atcttcaacta gtgcgtgtgt gtttgcttgt 240
 tactgctgcg gatctgttcc ggctaaataa ggatcgatcg attagtttgt gtaagatcac 300
 catcctatct gtcgtgtcat gtcacacaaa tagccatgta atgccatgta gtagcatgta 360
 atccgcctac aggatttgca tatttgttta cacg 394

<210> 1358
 <211> 238
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-031-Q1-E2-C5
 <400> 1358

acgggaaatg caataaaggc aatcttgaca tcaatgaact tgaatctctt gagaatgtct 60
 tgagtgtata tatcatggat ggtaaatgtt ctttctcttc attgcatgat tttgaaatcg 120
 cgaaaataaa attaaataaa ataaaaataa ataaacagct gctcaaaagg ataaaagctt 180
 acatatgctt gtatgcaacg tcatacatct tctatagtgt taccaaaatt caattaa 238

<210> 1359
 <211> 314
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-031-Q1-E2-D10

 <400> 1359

 cgggtatggc tgataaatta gcatcagagc tcatgccctc tgatgttgca aaggcggttat 60
 ggggcaccac caagagttcc tccaagataa ataaagaagt ccaggagctt ttaaagctta 120
 cactgagcaa ggcccagagtc aagctgactg agaataccat tttcaatcgg atcgttacgg 180
 actctaattg ctcagatcca ttcaatggtc tctatgtagg agcgtttagt ccatatggcc 240
 ccgaagttgt acagctccgt cgaaagtttg gccattggaa tagtactgat gacgtggagt 300
 ttctgagtat gtcg 314

<210> 1360
 <211> 417
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-031-Q1-E2-G7

 <400> 1360

 cgggtcgacg ggagtgttga ttcatgtatg cctgtcccca taagttagtg ccactttggg 60
 ttcacgacta gtcatgtcgg cccgggttct ctgtcatatg gatgctagcg acactatcat 120
 atacgtgagc caaaaggcgc aaacgggtccc gggccatggt aaggcgacac ccgtgggaat 180
 accgtgtgtg aggccacaaa gtgatatgag gtgttaccgg ctagatcgat gtgacttgga 240
 attggggtcg gtgacagctt tggatcaga gcctgactgc ctgtatgatt accaagccaa 300
 actggtcgaa gttgagtcta gaaatgcttt agttatgtaa gggaattgat tatggaaggg 360
 aacgtaaggc tctttttaat ccttatacct catggctttc tgatctgagt caacctc 417

<210> 1361
 <211> 316
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-031-Q1-E2-H4

 <400> 1361

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 ccatgggtccg cgcgcggtca cctcgtcttc caggcaccgg agtctccctt tcttccgttc 120
 ttcttttctt gtgattctgg gcagagctct cggcacagct cgtgctgata acgtgttgaa 180
 tgtacatgag aatgaatcga acctctatct ttcattgatc atcggatggg atttatacca 240
 ggctttgcgt cataaaacac atagagagac tctaccatgc aaaaagcggc cgctctacag 300
 gatccgagct tacgta 316

<210> 1362
 <211> 385
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-031-Q1-E2-H7
 <400> 1362

ccgggtcgac gggtaagttc acctctgaat cacttgctct cagtttcgtt catagtttat 60
 cattgaatca ctcaactcat tccttggttg cttctggttt atgcatgatt gcagcaactc 120
 tatagagttc ttgacgagca caaggccaga gccgacgtgg tcttgcttgc ggctgtgaag 180
 aagaaagctc atcagttgca gtacgaggtg cgctgggttg ccgtctcgca gtactaccac 240
 atctacctgg aacaaaagat gacaaaaact caagcgcaga ggcaacgact taccttgaac 300
 agggagcagt tcatgatggg aactattact aacttatgat tgtttcaagc agtcaactat 360
 atgtttcgtg ctcacatgtc atgat 385

<210> 1363
 <211> 412
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-032-Q1-E1-B1
 <400> 1363

ccagaaagac cattgccgga ggcaatcgag tattccttcg aagaaaggcg gctggccgctc 60
 tatttgtaa gagaagttta agctctcttt gcgtaggcga aagttggaaa cctgacggct 120
 gttacttggt agagactggc tgctgcctag tatgttggtc gacgacagtc gtccagtgtc 180
 gttctgattg tccccctctg ccacatttga ttgtttccat actcagcaaa ggaagcttgc 240

gcttcagcag cttccgttca gtactgccat tggtagata taattaatgt gtataggttt 300
 ctttctcggc actgaatcat cttgaatctg ttgattaat atagatcggg attgtgttct 360
 aaagaacagg agcgcgggtcg gcgggacaga aaagcggccg ctctagagga tc 412

<210> 1364
 <211> 462
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-032-Q1-E1-C1
 <400> 1364

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 caacacttga gcagttgaat aagaagaaga atgagagaaa gaggggaattt gttagtgtac 120
 agtcacaaat tgatcaaata tgtgggtgaga ttgctggcac cacagaggtc ggtgagcagg 180
 tggctacacc acaggtcaac gaggatgatt tgacacttga gaggcttgaa gattttcggg 240
 cccaactcca ggagcttgag aaagagaaga gcaatagggt ggagaagggt cttgagtatg 300
 taagcatggt acatgatcta tgtaccgtct tgggcatgga ttttctcagc accgtgactg 360
 aagttcatcc cagtctagat gactccattg ctgataactg caagagcatc agcgacgaga 420
 cattatcaaa acttgacgag acagtacca caactcatga ac 462

<210> 1365
 <211> 148
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-032-Q1-E1-F2
 <400> 1365

cacgaggcag gaggcgtgcc ctccaccctt gtggggccag gttttggtcc cgcccggtgcg 60
 ggggtgttgcg gccgctcttg aggatcctgg cttccgtccg cgtgggtgcg atgtcgtagg 120
 tcttctgtac tgtcaccgaa attcaatt 148

<210> 1366
 <211> 100
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-032-Q1-E1-F8

<400> 1366

ggtggcactt ttcggagaaa tgtgctctgc acgcctatct gtttactttt ctaaatacat 60
tcagatatgt atccgcccac gagacaatgg ccctgataaa 100

<210> 1367

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-032-Q1-E1-F9

<400> 1367

cgggtcgcagc gggtttctcca cataagtcaa atcactatcc aactgaatcg cttatagcgg 60
cactgtatct ctacagcgga tatcagccat ctctgcgtga cacttcttca actgggaaac 120
gtggaatacgc tcgtgaactc ctgacaatcc ttcgggcaat tccaacttgt aggcacttcc 180
tcccatacgc tccaaaactt tgtatgggcc tacaaaacgt ggcgctaagt ttcccttaac 240
tccaaagcgc ttaactcttc gaagtgggtga cacacgaaga taaactcggc ctctgacttt 300
gtaaaactgtc tccttacggt tagaatctgt gtagctcttc tgcctggact gggctacttt 360
gagtctatcg cgaatcaact tcaccttctg ttcagactcc t. 401

<210> 1368

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-A1

<400> 1368

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tttaccacaa tcctccttgc tgtacacacc ttttgagaga gacacacatg attcgggaatt 120
tattagaata ctctatgtgc ttcacttata tcttttgagc tatatagttt ttgctctagt 180
gcttcactta catcttttag agcacgggtg tggatttggt ttatagaaac tattgttctc 240
tcatgcttca cttatattat tttgagagtc ctacaaaaca gcatggtaat ttgcttaaatt 300
cgagaaattg gtcttaaagt aataggcatc caagattagt aaaaatttcc ttatgagtgt 360

gttgaatact atgagaagtt tgatgcttga taattgtttt gagatatgaa gatggtgat 419

<210> 1369

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-A10

<400> 1369

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aggggcatgc gtagtagtac tttgcttcga gggctaataa acttttgcaa taagtatatg 120
agttctttat gactaatgtg agtccatgga ttatacgcac tttcaccttt ccatcattgc 180
tagcctcttc ggtaccgtgc attgcccttt ctcacctcga gaattggcgc aaacttcgcc 240
ggtgcatcca aaccccgatga taggatatgc tctatcacac ataagcctca ttatatcttc 300
ctcaaaacag ccaccatata tacctattat ggcatttcca tagccattcc gagatatatt 360
gccatgcaac ttccatcatt atcatattca tgacttgagc attc 404

<210> 1370

<211> 366

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-A11

<400> 1370

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ttactcactt tgcataaatt attgattatg caacaatttt attattattc ctaatatctc 120
cggttgacac tattttccgt gcacaagtag ataatccggg caacgctgtc aacgcgggggt 180
atccacgtat cacatcacct cgggtgagcc ggggggttgt catcatttca cttacacaca 240
cccgggggggt ttgggttaca ctaacgggct gctccacaat ctccgggggtc ggactgggggt 300
ttacactttg cccatcgact atgctgtgtc accatttcat caaatcgtgt tctttacgcg 360
gacatc 366

<210> 1371

<211> 400

<212> DNA
 <213> *Triticum aestivum*
 <223> unsure at all n locations
 <223> Clone ID: LIB103-033-Q1-E1-A4
 <400> 1371

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 gtatcttaaa tcacacatac agatctcagt gcttaagggtc ggcttcaatg aaacaaccca 120
 ccatgtactc ctacatggcc tctcatcgat acctttacca aatcgtgttc accacaccac 180
 tctcattacc gacataatca tttcactcta gcccatcacc cagatgaacc agacctgtca 240
 cgactctaag catagcaggc atagcaaggt angaacaaca catacatatg gctcaatcaa 300
 ctctacaca tgctagtggg tttcatctag ttactgtggc aatgacaggt catgcagagg 360
 aaatgggttc aactaccata gcacacagca gtttgaaacg 400

<210> 1372
 <211> 433
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-033-Q1-E1-A6
 <400> 1372

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 catcctatat cagcaaggac tgggtgttcc accaatagct catctaagag aactctcaag 120
 ttaactgtgc tcaggctgga gcagccatca gatgggtgat tggatgggaa gttttcttaa 180
 tgttaaatta actaatggga tgggtcatag aggtcaaatt aaatgacctc tatgatccat 240
 ctcatcagtt aaataaacct cgaggtcctt gtttttttta acacatgtta aagaagggtct 300
 acttcataac tttttgacaa tgtgcatag gtcgcatata gttgatccat ccaagttggt 360
 tgtgatggaa taagttgtgt gtatattggg aaaacgcttg ctggtataca accgtttgtc 420
 attgatgaat tca 433

<210> 1373
 <211> 432
 <212> DNA
 <213> *Triticum aestivum*

<223> Clone ID: LIB103-033-Q1-E1-A7

<400> 1373

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attatgacac gtttcatcat tgtcatattg ctttgcata tcatgtactt gacatcatat 120
ttgtggcaaa gccacctttc ataattcttt catacatgtc gctcttgatt cattgcatat 180
cccgggtacac cgccggaggc attcacatat agtcatattt tgtcctaagt attgagttgt 240
aattcttgag ttgtaaataa atagaagtgt gatgatttcc attattagag cattgtccca 300
tgtgagggaaa ggatgatgga gactatgatt cccccacaag tcgggatgat actccggact 360
ttatgaaaaa taaacgaggc caaagaagcc caaacaaaaa aagaggccaa agaagcccat 420
catgtcagaa aa 432

<210> 1374

<211> 381

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-A8

<400> 1374

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atacttgcac acatagtcaa ctaggcattg atgatcacgt atgtcttatg aagtatgttg 120
tcatttgctc tagcgcatat cttacatctt tgacaccatg gaggcattgt aaattttagg 180
acatagatga acgcacacga atcacttaaa atattgtgag agtcataaac atcatggtaa 240
tttgatgtaa aaactatcat agtatgtgaa ttgaatgcaa tgatcaattt cacacttgat 300
agttgtgttg agataacgat gtagtggtaa taaagtcatg ctagatgcgt gactacgagt 360
ttaatgaatg cttgtgttga a 381

<210> 1375

<211> 330

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-B10

<400> 1375

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 tgcactgtac acagtaatca ccatcatgtg aggtcatgca gaacttcaca tgatctaatac 120
 agcgtcgtac cgggcatttc atgcaacaat ggaggtaaac gtgacagaga tgcagagtgg 180
 attcaatttg tctctcagtt cgttcgtgtt tagccgtgcg acaggataca gacttaagct 240
 ccttccaggc acaattggag agccacgaaa ctgacgacga cgtgcaattc accgtgccat 300
 cggatacacc gacgcaactg ggatcacct 330

<210> 1376
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-B12
 <400> 1376

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 acacgcaatt ttttgtcaga tgtctaaggg ggcttggttt ggatcctcat tttgtttttt 120
 ccttgttcaa atttgtttat gttctttcag agccattgcc atggttggca ttggcaatgc 180
 tgttggttg gtttggttg gcttgtgaga ggggtaagcg gtgagcgaag ataagggtg 240
 ggctgagctt tctaatgag aggagagctt cactggagcc caattccggt gcccaaattg 300
 agcacatttc ctgtgagaaa ttcaccccaa atctgtactg tttttggtat tgccatagt 360
 gtggatgcca tcttacgttg catatggtga gatgccagct g 401

<210> 1377
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-B2
 <400> 1377

tgacgggtcca gaattcacgg gtcgacggga gaagggtcta ggttacctag ggtttatgac 60
 gtctcgttgt ttttgcaagc tagcatgtga ctccgggatg cctgttttaa gatttcgctt 120
 gtgttgaaag atattattat ttactgcttg tagcctacct gggataccat catattttgc 180
 tgattatgga actactttta aaaaaaaaaa aaaacaaaaa aaaaaaaaaa aaaaaaaaaa 240

aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaagggg gccccccaaa ggggtcaaac ctaatttccc 360
 cggttaaggga attttaaacc cctccaaagg ttccccccaaa ttcaa 405

<210> 1378
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-B5
 <400> 1378

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 gttgaattcc aatatgtata cgaggtctat agtacttcac aatatgttca aactcacata 120
 atcccagtc aatgagaatc taaatgcatt tcatagttac tactttgtag gatgcaacaa 180
 aaccaaccat aactctacat catccattat aaaatcaaca ttttgaacac attccaatgt 240
 gtgaatgaag cgtgtagaga gagcttgca agatggagca gatagggcgg gaaagctaca 300
 tgctaaatag gggttgtgtg tgtgtgtgtg tgtgtgtgcg cgcgcgcgcc agatactgag 360
 agaaatcaaa cctatggaga gaaatgtgtg tgtatgtgac ggaaagctac atgctaaata 420
 gggttttcac gaagag 436

<210> 1379
 <211> 300
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-B6
 <400> 1379

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 catcgggtatt gtttgtaaac atgtaacca aaattggatt ctactagttc tgttacacat 120
 ctgagtcaca gaggaggata gttgtgttaa tgcaagagt gagacgaact gtttcttgct 180
 attaaccgaa aagccatgcy gttcagagtt gtcacaaaaa attaaaaaat ataaaaaaa 240
 caaaaaaaa aaacataaa aaaatagaac aaataaggaa aaaaaaacta catgcaaaaa 300

<210> 1380

<211> 421
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-033-Q1-E1-B7

 <400> 1380

 attccccgggt cgacggggagg ggcgttaaac gatagcgcta gttggggaggc aacccaattt 60
 tattttgtgtt tttttttgct tatgttttagg aataaatctt gcatctaact tctgttttaga 120
 tgtgttttta tgttttaatt agtgtttgtg ccaagtagaa tctatgggat aacctatggt 180
 gatagttaat ttgattctgc tgaaaaacag aaactttgca cgcataaagt tagttttggt 240
 aaatcacagg aacgtgcttt tgcgttgatt attcttgctt ctgatcaata gacaaatttt 300
 ccaggacttc ctattttggt aggattttta agttccaga agtttgtgtt agttacagat 360
 tgctacagac tgttctgttt tttatagatt ctgtttttcg tgtgttggtt gcttattttg 420
 a 421

<210> 1381
 <211> 304
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-033-Q1-E1-B8

 <400> 1381

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 gagtgtcttg aaaactttct gataattgtg ggatttgctt tgtaatggta atcgtgaaat 120
 tgggtgtggtt aagaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aagaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaagcggccg ctctaaagga 240
 tcaaagctaa cttacgcgtg aatgcaaggt catacctctt caaaaatgtc accaaaatta 300
 aatt 304

<210> 1382
 <211> 364
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-033-Q1-E1-B9

<400> 1382

caggatatagg tctagaattc ccgggtcgac ggggtcagga agaagtgggg cggtggcgtc 60

atgggctcca agtcgcaggc caagaccaag gccagggaaa ggctcatcgc caaggaggct 120

gcgcagagga tggactaggc ctagccctat aagtattgtc agagcatatg ccatgtagtt 180

tccctttcag tctgtcctga ttttgacgag gaactcgaac ccttttagca gcactgtgga 240

atcgtattgt gggtttctga ttcgctgttc cgttctccag acttctgcaa agatcagatg 300

aggtttacc atgtttggat tctatatagt tttatgtcct ttgtcgagtc aagaaaataa 360

aaac 364

<210> 1383

<211> 111

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C11

<400> 1383

attcccgggt cgacgggggtc aggaagaagt ggggcggtgg cgctcatgggc tccaattcgc 60

aggccaagac caaggctagg gaaaggttca tcgccaagga gggtcccca a 111

<210> 1384

<211> 379

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C12

<400> 1384

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gagaagaagg aagaggaaaa gaaggaggaa ccagagccgc cgaaacctga agagaaaaag 120

gagccaacgg tgatctccgt ggtgctgaag gtgcacatgc actgcgaggc ctgcgccacg 180

gcgataaaga agaggatcga aaagatgaaa ggagtgcaat ctgcagaccc agacctgaag 240

gcgtcggaag tgacgggtgaa gggcgtgttt gaggaggtea agctggccga gtacgtgcac 300

aagcgcaccg gcaggcatgc ggccattatc aagtccgagc cggtcgcccc ggccgagaaa 360

gccggcgaag gcgacgcca 379

<210> 1385
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C2

<400> 1385

ggtccagaat taccggggtcg acggggacact aagttttccc caattcattt ggctccaatc 60
 catccccgaa caaggcaaga acacggacaa gccaaagaaca acaactcccc agcgtctcca 120
 gcgagcagca tttaactcca tccaggcttt cgagggtacaa gaagaaaggc ttctgttcgg 180
 ccatggcttt ccagctcca gctgctgtat tccttgatga gaacctgcca atccatagag 240
 gcaagagggc tgatgggctg aacgcgaggc cactgaaacc atcagcaaag ccatcagcaa 300
 ggaaggccct gcgggatgtg tccaacacca gcaagcccca agcgcctagc attcaaaaag 360
 gccacccctt gaaggacagg tccgtcctga aagacaagtc tgctcttcgc aaccaag 418

<210> 1386
 <211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C3

<400> 1386

cgggtccagaa ttcacgggtc gacgggatct tcggcccat caacgaatca tatttctcgg 60
 tcaagatgtt tgaggagtc attgcaacat cttacaacga aggtgacaag ttcttcattg 120
 accccatgaa gctgctgcc ctctcacgct tcctgccga gccaaagggc ttgactccaa 180
 gaggtggtgg tcgagggtga agagggtggtg gtcgtggtgg atttggtggc cgtggtggat 240
 tccgtggaag aggtgcacca aggggtcgtg gacctcccag ggggtggaggc cgtggtttca 300
 gaggacgagg cagattctag gatgtagttt taagtttgct gtttgttgaa acatgatgct 360
 ctacattata tggtcagctg gaaacattat gc 392

<210> 1387
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C4

<400> 1387

taccggtcca gaattcccg gtcgacgggg gagcaagtgg ccatcaagaa gatcgccaac 60
gccttcgaca acaagatcga cgccaagcgc acgctgcggg agatcaagct gctccgccac 120
atggaccacg agaatattgt tgcaataagg gatattatac ctctgcaca aaggactgca 180
tttaatgatg tctatattgc atatgaattg atggacaccg acctgcatca aattattcgc 240
tcaaatacaag ctttatcgga ggagcactgc cagtatttcc tttatcagat ccttcgtggc 300
ttgaagtata tacattcagc aaatgttctc caccgagact tgaagcctag caatcttctt 360
ttgaatgcaa actgtgacct aaaaatttgc gattttgggc ttgctcgta caactcagaa 420
actga 425

<210> 1388

<211> 425

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C7

<400> 1388

ggtacaggtc tagaattccc gggtcgacga ctcaatcaca caagcaacca gaaatgacaa 60
cctacgacac cacaacagtt gctcaaaaaa aaagtacaag tgcattttac ttacaaatgg 120
ctacgaagaa tcagagcctc agaagttgaa gaaaaagtag atagcatcgt gctcaaaaaga 180
aaagcaaaag agtagatagc ctctgtcca agtccttcag acgctggtcg ccaactggca 240
tattcagtac acagactcac gaaatcaaca tacaactcgc aatctaataa atatcttatc 300
agccggcata aacaaccaag cagcatgcac gcaccagga tcgacgggta gcaaggagga 360
tgccatgaga gacttaattg tgaagcttct taattaactg tgcttacttt gaaaatacct 420
ccctt 425

<210> 1389

<211> 435

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-C9

<400> 1389

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tactactacg tgcaggccgc tgacgacgac caggagtagt ttaggaggat cccaggcagg 120
aggcctgcmc ctctttcgat ctgtatctca gtttgtgcta gccatcttat ggcaacttgt 180
ttaacttatg tctgtactca gatatttggt gcttccgctg actcgtctat gatcgagcac 240
ttgtattcga gccctcgagg cccctggctt gtattatgat gcttgtatga cttattttat 300
ttttagagtt gtgttgtgat atcttcccgt gagtccctga tcctgatcgt acacgtttgc 360
gtgtatgatt agtgtacgat tgaatcgggg gcgtcacagg gggagttgta attgtcttag 420
actcgagacg taaag 435

<210> 1390

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-D1

<400> 1390

ccggtccaga attatcgggt cgacgggtag gccttgtttc gaagcattgc cataccgttt 60
gtgctcactt ttaccacttg ctaccttgct gtttttatat tttaagatta taaaaaccta 120
tatctaccat ccatattgca cttgtatcac catcccttcg ccgaactagt gtacctatac 180
aatttactat tgtattggat gtattgggga cacaagagac tctttgttat ttgggtgaag 240
ggttgttcga gagagaccat cttcatccta cgcctcccat ggattgataa accttaggtc 300
atccacttga gagaaatttg ctactgtcct acaaacctct tcacttggag gcccaacaac 360
gtctacatga agaaggttgt gtagtaggca tcaagctctt ttctggcgcc gttgccgggg 420
aagtttagtg 429

<210> 1391

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-D10

<400> 1391

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 tggagaaaaa tcgagagaaa gtacaggaat gactttgcag gtgatgcaag gaacgtatgg 120
 tttggcctaa gcgcagatgg tattaatcct tttggggagc agagcagcaa ccatagcacc 180
 tggcctgtga ctctatgtat gtataacctt cctccttggg tgtgcatgaa gcgcaagtgc 240
 attatgctgc cagtgtcat acaaggctct aagcaacccg gcaacgacat tgatgtgtac 300
 ctaaggccat tagttgaaga actcttacag ctgtggaatg gaacaggtgt acgtgcgtag 360
 gatgagcaca gacaggaaga atttgaccta aaagcgttgc tggtcgtgac tatcaatga 419

<210> 1392
 <211> 435
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-D11
 <400> 1392

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 aattggactc cttccaacgg gggcgggcac gcttcaggct actcaaagga ggctgacca 120
 accacagctt gaaagctgaa gcactaacca caacatcaac atccaacctt tttgacattt 180
 gcaatcccag ttttcacatt accatccttt cccacctctt tttgcttgtg gtgttttcgg 240
 agtctgtagc tatttagtac tttctatgtc gtgggctacc agaggctccc tagaggctgc 300
 aaattttggc gctgagtaga agcaagggaa cggacggagg gtgctcccag tttctcctga 360
 gcctatatgc gtgtattaac tgaaggccgt ggaaggcaaa actcgtgggg agctctctga 420
 gattttggac tgtaa 435

<210> 1393
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-D12
 <400> 1393

gccggcagggt acaggtctag aattcccggg tcgacgggac tacacaaatg tcaagaaggt 60
 tcttgatgat gttctccccg gctacgcca atctggaggc accttcacca ggctattcg 120

taagtacgac aagcacgtgt tctcccacaa tacgacgttc tgctgctca agcagtcgcc 180
 tggcgggtcag aaggggtgcct actacaccat ccatcacatg cgggcgatcg tacgggacca 240
 tcatcaactt ctgctaccga gtaaactcca agattggggc gcgagcgtgt cggcaatcca 300
 ggacgcggac ctccgacaag aattctttcg catccagtcg gagtttgcg aaatcatcca 360
 tcaagatgtc ctctgtacct cggggcagtt ctacctcaga aatcaaccgt ccaacagtga 420
 cat 423

<210> 1394
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-D4

<400> 1394

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 ataaaaggtc caaaagctca gctgatggta cttatgcaa cccacctatt gcagttcact 120
 gaagctgtct acaaggatgg gagcaggat gagagtgtga caaaggctgc agttgcagtc 180
 cttggtgatc ttgcagatac acttgGCCa atatcaaaag atctgttcag gaaccacctg 240
 ttccatgtcg aattcttttag ggagtgcctt gattcggacg aagaagtcag ggaggctgca 300
 tcgtggggcg agggaatgat aaaccaagca gtggttgctt aatatgtgaa atcattttct 360
 gttgttggtt gtggtggaag tttctcctt gtgcat 396

<210> 1395
 <211> 435
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-D5

<400> 1395

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 gtgcatgagc ttgatttggc catggcagag cgggCGctga gatgagatgt agagaggac 120
 catggtgggt caacgcttgg ggaaaagtaa cgagtggctg tgcttgctcg agagaagaga 180
 taagaagggg agggggcggg gcgtgcttga ggtaggtgcc tctcgtgCG tgcgatattg 240

ccagatcgta cgcgaccggc tcgatgttcg gccggcgcg cgcgacgcaaa catttcccat 300
 aaaaaaatgc catccaataa acatattcac gaatttcctt taaacatagt gaaaagagat 360
 gttgaaaatc atttaaacad tcattttttg acaaatagtt gctttaattg gattattatg 420
 ctgatcaaat gtatg 435

<210> 1396
 <211> 420
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-D7
 <400> 1396

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 gctcaacctc agaggcctaa tgtcactgtt cggaattgga aagacaagga ctactcgggtg 120
 gtgaccatcc ggtgcaagga caggccgaaa cttctgttcg aactgtgtg caccttgaca 180
 gacctgcgct atgttgtcta ccattgcaaac attgacgcca gcaataatca agcgtaccag 240
 gaattctatg taagacatgt gaattgatct ccaatgaaca ctgaagctga aagattgaga 300
 gtcattccagt gccttgaaag tgcaattgag cgcagggtat ctgagggtgt gaaacttgag 360
 ctgtgttcaa atgacaaggt cggcctcctg tctgagggtca ccctcatctt ccggggagaac 420

<210> 1397
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-033-Q1-E1-D8
 <400> 1397

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 gagaaggaaa ccctagccgc cgtcgtccag atctgcttgg gttggtggag ggtatggcta 120
 tggcgtgctg caccatggcc gccaaagtga agcataagat ccccgccgct gtccagcggg 180
 ttcgctctc ttctcgtgct ccggcacctg ctgatgctga ctccgaccgc ttcggcttcg 240
 gcccaaagtt tcgcccggca ctggataaga ttgtagagaa acacatgaag aggcgcaagg 300
 atgaggcctt ggcctgtggt gctggcttca gtcttgagc actcaccttt ttgcttgggg 360

tccatangct cggtttaacg gagatggctc aatggttaat gactggaata tctatcctgc 420
accgcatgtt 430

<210> 1398
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-D9

<400> 1398

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tgaagagcgg caagtacacg ctgggtaca agaccgtcct caggaccctc aggaactcca 120
aggcaaagct tgtgatcctt gctaacaact gccctccgct ccgcaagtct gagattgagt 180
actatgctat gttggcgaag atcactgtcc accactacca tggaaacaat gttgatttgg 240
gaactgcgtg tggtaaatac ttccgagtct gctgcctgag tatcatcgac cctggcgatt 300
ccgacatcat caacgcaaca ccagctggcc ggtaaacctg tgtatgccat tttcagtgtc 360
tcgtctgatg cgtcatctaa ggtgggtcta gagtgtagtt cttgctggac ttgattttgg 420
tctgtgtaca tc 432

<210> 1399
<211> 416
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-E10

<400> 1399

gtacagggtcc agaattcccg ggtcgacggg gatcacagaa acatgacatg atgcacaaac 60
aagtatgatg catgtccggt ttaaattagg catggaatgg caaatgcaa caaacaacac 120
tacaatttaa gtggagctca atatgcaacg agttgcacat tgacggaaca ccacatcaat 180
tatttagttc tctctcggtt atgtaccaa caatattaaa tgttgattaa catggcaaga 240
ggtgaagcat aagtaacta actatttagg caagtttaaa tgtggccgga acaacaaaca 300
acaattatgg aaaatcctca tgtccatatt atagatttgg tgctgctctg ccctaaacca 360
tatttaaagt tgtaaacag caaataaag tgcacatgt taaactagga attttt 416

<210> 1400
 <211> 337
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-033-Q1-E1-E11

 <400> 1400

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 cattccgaga tatattgcca tgcaactttc caccgtttca tttatgacac gtttcatcat 120
 tgtcatattg ccttgcatga tcatgtagtt gacatcgtat ttgtggcaaa gccaccatgc 180
 ataattttatc atacatgtca ctcttgattc attgcccac ccggtacacc gccggaggga 240
 tttagataga gtcataatttt gttctagtat cgagttgtaa tcattgagtt gtaaataaat 300
 agaagtgtga tgatcatcat taacagagca ttgtccc 337

<210> 1401
 <211> 389
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-033-Q1-E1-E12

 <400> 1401

 tccagaattc ccgggtcgac gggaccatac agaagttaga atacagtata tattacacca 60
 atatgaattt ataattattt cacaatagta aataagtggg gatttatttt cttatactaa 120
 cggagcttac aagttttctg ttaagttttg tgttgtgaag ttttcaagtt ttgggttaaag 180
 attcgatgga ctatggaata aggagtggaa agagcctaac cttggggatt gccaaggcac 240
 cccaaggtaa tattcaagta caaccaagag cctaagcttg gggatgcccc ggaagtcac 300
 ccctctttcg tcttcgttca tcggtaactt tacttggagc tatattttta ttcaccacat 360
 gatattgtgtt ttgcttggag cgtcatttt 389

<210> 1402
 <211> 463
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations

<223> Clone ID: LIB103-033-Q1-E1-E4

<400> 1402

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aagctaattct cgtctccgat cgacccgagg ctgctcgaat cctccttccc caccgcctca 120
agatgcagat ctttgtgaag aacttcacgg gcaagaccat cacccttgag gtggagtcgt 180
ctgacaccat cgacaacgtc aaggccaaga tccaggacaa ggagggcatt ccccccggacc 240
agcagcgctt tatcttcgcc ggcaagcagc tggaggacgg ccgcaccctt accgactaca 300
acatccagaa ggagtccact ctccacctgg tgctgcgcct gcgtggcggc atgcagatct 360
tcgtgaagaa cctcacaggc aagnacatca ctctggaagt tgaaaactct gacaccatcg 420
acaacgtcaa ggccaagatt cangacaagg agggcaaccc ccc 463

<210> 1403

<211> 419

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-E6

<400> 1403

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gccgctaagg cttcggcgctc cggacagttg acaatttaat tcttcttagt gaggaatcta 120
ttccaaagct cgcgggcgga ctctctgggc cattggatta tgtgacttag atcgtctgga 180
tccggaggcc agacataatt cccttgaaat tttccctaa aagcgtcttc tagttcctcc 240
caactcccaa ttgagttttc ggggaggctt ttcaaccagt gtcgagatgg tcccttcaac 300
ttgaggggaa ggtatttgat ggcgtggagg tcatccccac gagccatgtg aatatgcacg 360
ataaaatcct cgatccagac ccctgggtct gtcgtgccgt cgtatgcctc tatgttcac 419

<210> 1404

<211> 271

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-033-Q1-E1-E8

<400> 1404

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 gggtctagac agatgcttgc ttatgtagct gcagaaagtc atgttttaga aaaggaggat 120
 gacccccggc ctttgcattc gagcgatgca tacggtcact ttattaatta ttctcataag 180
 accttacaaa gtaataccac agtaagacta anaaataaaa gggaaaaaag agaaaataac 240
 caaaataaaa aaaaaaaaaa aagcgggccgc t 271

<210> 1405
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-E9

<400> 1405
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 gaagggcaag aagaagagca agaagagcgt cgagacctac aagatctaca tcttcaaggt 120
 gctcaagcag gtgcaccccg acatcggcatt ctctccaag gccatgtcca tcatgaactc 180
 cttcatcaac gacatcttcg agaagctcgc cggggaggcc gccagctcg cccgctacaa 240
 caagaagccc accatcacct cccgggagat ccagacctcc gtccgctcg tctccccgg 300
 ggaactcgcc aagcacgccc tctctgaggg caccaaggcc gtcaccaagt tcacctctc 360
 ttagactgcg tcgcctgtat ctagtagcaa atgtagttct atactgttgg cttaatgctt 420
 gt 422

<210> 1406
 <211> 293
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-F1

<400> 1406
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 attgatattc taacgtcgca tggcttcgcc tatcacaacg catacaatta ctattccaag 120
 attatttctc gaaagggcat ctcataatgc attgagatca atgatcaatt gatataccta 180
 tagtgtgccc ctgcgcccgt atatcaatga tcaatgagga agaagtgtcg ccaatcacag 240

ggcgcaccat tacgagtctt actcccacca gtagtatgac tcccatcctt cca 293

<210> 1407
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-F10
 <400> 1407

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 gaggtgaacg gtcacgtgca agcacctagt gcatctatga tcacagtagc aaaaatcggt 180
 gatggttatt tcaccgaggt tgcaaaggac ccaaataccc ctgttttgaa gttcatcaat 240
 cttgctgagg caatttcagg caattcaagg cttttccatg atgggatata tcgcgccatt 300
 gacatgtata tgaaggagca cccaagccta agcaagagcg acaagaagaa gctgtgctgc 360
 ctcatggact gcaagaagtt gtcgccagaa gcatgcgctc acg 403

<210> 1408
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-033-Q1-E1-F11
 <400> 1408

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 cgtggtcacc gcgcgaactc ttccctcggg ccagcctacg tccaaaaatc atgtctggca 120
 tgttgttcgt ggtggtttta aagtttacca cgctttggtt tggatccagg tgaagtagag 180
 gagtttttac atgccaagta agtttctcat cagtaacttt gagaggttac tgagggtcaa 240
 tggctgggag ttgggggctg tgctttggag gttagccatg atctactaag gtgaagatgc 300
 acaagaaaat ccaggcaca tggagcaagt aaaatggtag ttgctataga aaccaccatt 360
 tctgtccaga acagaaaata tttttctgta gcanaaatat tccanaaagt gatgaaaata 420
 tttttacca ggaa 434

<210> 1409
 <211> 405
 <212> DNA
 <213> .Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-F12

<400> 1409

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 gcagtctctt aatgctagag tgaaacctgg ccctgctttt gctacttcac ctatctgtgt 120
 tactgataag gattatgaat tctctgttga tcatgaaatt cttacttttag ttgaatctga 180
 tccttttttat ggccttgaat ctgaaactgt tgtggcacat cttaccaagc tgaatgatat 240
 agccaccctg ttcactaatg atgagaagtc tcgctattat tatattctta agatatttcc 300
 gttctcatta aaggggtgatg ctaagacttg gtataattct cttgctcctg gttgtgtgcg 360
 tagtccacag gatatgattt attacttctc cgctaaatat ttccc 405

<210> 1410
 <211> 394
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-F4

<400> 1410

cggtcaagaa ttcacgggtc gagtacatca acacatgcaa tgccttttgtt cttcgaatgt 60
 tgttcacttt tgagagtgat gttgttcact tgcgtatgag aaaaaaaca tccgacaaaa 120
 gaaattatgc agctcacttg cctgtctgat gcagtgcagt ttttatttct gaagcagtgc 180
 ggtcggccta tgatgttggt catcccgtaa gtgcaaaaaa attggttacgg aaacgaaaaa 240
 aaataatgcg gttcacttct tgatagtgtt gtgattcatt tacaccatat gtgaagtgca 300
 ctctactttc tcgtccttga aaaaatcacg tttgaataaa agaaaccatg cagttctctt 360
 acctgtatga tgcagtgcgg tttttcatcc aatg 394

<210> 1411
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-F6

<400> 1411

aattcccggg tcgacgggga acaaacttgg tctctgtgtg cttacgatgg agtcccgcac 60
ttgctttgag aactgtaagc gtgtttaacc tgacagcgcc tgtaattgta cgccctttcc 120
gcataacttca cagcttggtg tcttatgagg tgctgcatgg cagcatgctg gtttatgccg 180
cctcgggtcat tattatcatt tgtaacttgt tagagtgcac attaacttca tgaggatata 240
cacataatac ttatgctgct gttgttggtta cgacctttat gccattgcct tgtgttgcta 300
atcatcaata atccttgtaa gcttgatcat gggttgggtt gctagctggg gtacatttga 360
gattatcact tctgcatatt gtttt 385

<210> 1412

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-F8

<400> 1412

taagggtctag aattcccggg ccgacgggga tcttcatccg gagatgatgg agagcgaaac 60
acctccccat gcttccccgc ctcatgaggc gggcgaccgc gaggtgtcgt cacagaggat 120
ttctcctgat ccgccaaggc cagagggtta tcttcggcc tcccgaagtc cgaagtattc 180
ggctcctaaa gggagcagca gaaaaagtct ggagctgtcc ggtgcgcgac cggacgtatt 240
gatgagtctt ctggagcaag cggctatctc agaagcgcac cgtacgctaa tgggtatggt 300
ggttgagagg atttcatccg ccgaaagcgg gttgcatgaa gcttttatga gcctgctgag 360
aggctttgag gtacgcaaag taatatatat tttttgacag taccgcacat gctaggtgtg 420
ccctatgcag atagtagccc ctg 443

<210> 1413

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-G1

<400> 1413

ggtccagaat tcacgggtcg acggggacgc cattgaccag gccatccagt ggctggacgg 60
 caaccagctt gctgaggcag atgagtttga cgacaagatg aaggagctgg agggcctctg 120
 caaccccata atcgccaaga tgtaccaggg tgccggagct aacatggcgg gtggcatgga 180
 cgaggacgat gcacctccgg ctgctggcgg cgctggcccc aagatcgagg aggtcgacta 240
 agcgagcact tgtaccagtc ttaccctaaa gttattccgt tcgttatgtt ggatgctact 300
 gcagtacgtg gtgttgatg tgatgtgtgt gaactgcgtt tgctgctgct tttctgttaa 360
 tgttagtgc atctggtgat atgctgct 388

<210> 1414
 <211> 386
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-G11
 <400> 1414

ggtacaggtc tagaattccc gggtcgacgg gagcttaaac ttccttctgc taatgaattg 60
 attagtcttc agtcaaacia tgaggcaa at ggaaatctgg aaagcacacg ggaagtgcag 120
 gtgaacccaa cgagcttata tcaatacagg gacatccaga gaaagattgt tgagtttata 180
 agaaagagat accatattct ggaaaaatgc ttggaccttg aatatgccgt gataaaaaca 240
 aatactcctg ttctgatga tcttactgaa caaaatattc ctatgggaca tagcccagct 300
 gttccagata tcagtgaagt gttgagagaa cttccccctc ttgtaccaat ttctgccaaa 360
 gaagtggctt ctgatggctc aactga 386

<210> 1415
 <211> 351
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-G12
 <400> 1415

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 gaagctgacg actcacaatg tgatctaatt ctgtcccatg taattttggg tgctacaatc 120
 ttgttagtga cattaggtgt tacagccttc aggttacatt ccgtgtagaa caacagccat 180

gggtgacaaa gaacttgatc agcagttatt ctagaagaga catctcgatc taacattcga 240
 cttataagat atcgtccaag aactgacatt gattcccatg gagcgctgtt gaaatcaagc 300
 tcaactgtct ttatagcttc aaagacagct tccagagagc ccccttgaaa t 351

<210> 1416
 <211> 416
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-033-Q1-E1-G2
 <400> 1416

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 tccagatgca atcggaaca tgacatctct tcagacactg aggctaggtg acaattacct 120
 ctgagggtga aaatctgaac tgttcggaaa cttgtgcaac ctgagctggc tagagctgtg 180
 gtcaaatgag atcgaccagg atatgtcaga ttttatggag gggtttccgg tgtgtacaaa 240
 gagtaaattg cgggtccctag atctgtctgc taccaacctt actggcagga ttccaagcag 300
 tattaagcag tggaaaaaatt taagtgatct tcaactctct gagagtangc ttgtgggatt 360
 aatacctttg ggaattggca agatgactaa tctacggtca ttgattctaa acaaca 416

<210> 1417
 <211> 385
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-G3
 <400> 1417

ggtccagaat tcacgggtcg acgggctgaa cttgatgctg gtgacgagaa aattagagag 60
 ttgatatcag ttttagacca aaggaaggat gaatcaattg aacgcacatt taaaggagtt 120
 gcaaggcact tccgcgaagt gttctctgaa ttagtgcaag gtggtcacgg atacttggtt 180
 atgatgaaga aaaaggatgg tgatgctggc gatgatgaca tggatgagga cgtgcctcgt 240
 gaagcagatc ctgaaggagg gatagagaag tatattggtg tgaaagtcaa ggtttccttc 300
 actggcaagg gagaaactca gtccatgaag cagttgtctg gaggacagaa gacagtgggtg 360
 gcattaacac tgatctttgc tatcc 385

<210> 1418
 <211> 426
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-G5

<400> 1418

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 tgaaagggat gacgcttcca gttgttaaga taaatgctcg ggttgtcaag gatcattcct 120
 ctatcgaacc atgcataaag tccagagcag ctgagcggtc actttctaga tcttcacgct 180
 cccagtcaac tggaactgat aggaattctg ttcatgaagg tttgtctcat ttgaagaaac 240
 atcatgaaca tgatttaca agtctgcaga agtccaagtc tggtccaaac atcccagagg 300
 accatgtttg cactgttgaa gaattgtcag tcaaactggg tgactgggtac tacatggatg 360
 gaactggaca tgagcatggc ccattttctt actctgagtt gcaaaaagtta gttaaaaggg 420
 gcacta 426

<210> 1419
 <211> 406
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-G6

<400> 1419

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 caacgaggac tttattcttg cttttaatct tttccttcat ctgaggcaaa aggtgaatt 120
 tgctccttct tttattttcg ttccttcccg aggcattggc gaatttcctt ttttttattc 180
 ctctctaggg gcttttgcaa cgattgttga cgcattctat taattttgga tgacataaca 240
 tatataaatt ggtggaatga tgtgcatcga ggcgatgtga gactatttaa tataagaaca 300
 tatcttttag tttatatcaa accatgttgt agtttgggtg atcgtaactt ttgatacaca 360
 tgcaggatct gccccagatt taatggattt acttgggcca tagagc 406

<210> 1420
 <211> 433

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-G7
 <400> 1420

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 ggaaaagacc atcgctcgtc cccgaccgcc actcataagg aagacaataa ataaataaat 120
 tatgctccga cttcatcaca taacggttca ctatacgtgc atgctacggg aatcacaaac 180
 tttaacacaa gtatatctca aattcacaaac tactcaacta gcatgactct aatatcacca 240
 tatttatatc tcaaaacaat tatcaagcat caaacttttc ttagtattca acacactcat 300
 aagaaagttt ttactaatct tgaataccta gcatattagg attatttaag aaaattacca 360
 tgctatttaa gactctcaa ataactaag tgaagcatga gagatcaata gtttctataa 420
 aacaaatcca aca 433

<210> 1421
 <211> 425
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-033-Q1-E1-G8
 <400> 1421

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 cgccaagcag tacgccgagg agtacgatgc ccaggacaag gagttgggtc agcttaagcg 120
 tgaggccccg atgaagggtg ggttttatgt cagtcctgag gccaagctgc tgtttgttgt 180
 cagaatcaga ggtatcaatg ccatgcaccc aaagaccaag aagatcttgc agctgttgcg 240
 tttgaggcag atattcaatg gagcgttcct gaaggttaac aaggccacca tcaacatgct 300
 ccgcagggtc gagccatatg ttgcatatgg gtacccgaac ctgaagagtg tgaggggagtt 360
 gatctacaag agaggttatg gcaagctcaa caagcaaagg attcctctga ccaacaacaa 420
 ggtca 425

<210> 1422
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-G9

<400> 1422

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gtgttgggtga agaacaatct ccgcagggct tcgcctaagc accacagaaa ctatgacgga 120
ggataaacta gaggggacgg ggttgccggc acacggcttg gtgtttcttg atgtatcttt 180
ggtgctagca cctacccttc tatttatatg ttgagccttg gggtcgaaac ttggtgtaaa 240
agccttcaca aagtcggttt caccgaaag gcaagagtcc ttctcggact ccagggccag 300
acgctagggg tcccgacgtc tagaccaga cgccagggac cctggcgtct ggcccccttg 360
actcgccaaa acttcctttt gcgctttcaa aaaaccttgt gggctttccc ctttgcccc 419

<210> 1423

<211> 374

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-H11

<400> 1423

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agcggtttgg catgcccac ccaceaaagc ggatcatagc aactgggtggg gcatcctcca 120
atgagagcat cctcaagttg atcgcgcaaa tctttggctg cctgtcttc acagttgaga 180
gacctgattc ggccctcgctg ggtgcagctc tgagagccgc ccacgggtgg ctgtgcaagg 240
aggaaggagg ttttgttccc atctcccgga tgtacacggg caacctggag aagacctcgc 300
tgggcgcaaa gctggcggtc ccggcgccgg gggaggaggg catggagctc ctgaagaagt 360
acactgtgct catg 374

<210> 1424

<211> 376

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-H3

<400> 1424

gggtcgaggg ggatcgtgaa gaggagtatg acggcaatgt tgaggccagt ggcgacgact 60

tctctgatga gccttctgaa tagaggaagc ctttccgtgc gcttttggat gttggtcgta 120
ctaagaccac cactggaaac cgtgtgtttg gtgcccttaa aggagcattg gaccgtggtc 180
ttgacattca ccacagggac aagagatttg ctggtttcaa acaagatgat aaatcgagg 240
atgctgagat tcagcgcaag tacatctttg gagggcatgt tgctgactac atgaggtcac 300
tagcagatga ggaaccagag aagttccaaa ctacttcag tgagtacatc aagaagggaa 360
tctcagctga tgacat 376

<210> 1425
<211> 413
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-033-Q1-E1-H5
<400> 1425

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ctcccccttc ttggaataga aatcctatgg ttatgttctc ccaatccatg aaatctgagt 120
aagtttcggt agatccctgt agtgtattga ttgtttgaat ggtacagggtg ataggtgatt 180
agttgtttca tctatgcaaa tgatttctgc tagtaatccg aataggggta gtgttcgtgc 240
taataattcc tagccaagac ttgacaattg attttgaatg acctacctat gtttgtgcc 300
ttattttatt caagattgggt ctgtacatag atgattgtgc ttaaaatcaa accataatct 360
ctggatatgt ataagtaa atgccataaat tctaatacct acttcacggc atg 413

<210> 1426
<211> 423
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-033-Q1-E1-H6
<400> 1426

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acgtcccaca tgtcggcgaa tgaaagtatt ctttccgata tagaggacga gcaatgagta 120
ttcattgttt atttttgatg aaagctattg tctccattgt tactccttga ctttgtcaat 180
gcctctctct cctccacata agcgggggact acttgctatg catgcagcgg gcagctggca 240

tcttgagggg ccagagcggg gagagcgggc tccggaagcg gtccggactc cagcagggcc 300
cacctcacat tatcaccata tatttcttgg agtccgtgca cggcgggcca gcgatctctt 360
ctccctcccc catttctctc ttctcagtcg ataccgcgcg agcgattaaa tttcggctat 420
cga 423

<210> 1427
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-H7

<400> 1427

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accagagcct tttggcaggc aaagactgct tttgtcagga taagctgtac tagctgtccc 120
ctttcaaatt ggtcattggt ggctcccttc cttgctcaat atttggggag aggaccaggg 180
cctctataaa taggattagc caccacagta ggaggcaact agtctcaaac gagtctcgaa 240
ctcattcaga gacatctgat ctttagccga tccttagtca cacacggagc acaagaacac 300
ctcacctcag gaggttggtc ttcccccttg aatgtcatcc atagcccaag aggcaatcca 360
ccaccaccac actcactaca aaaagaagac acttccgtga tgatacgtgt ttgtcacagt 420
aggatcatgtt tt 432

<210> 1428
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-033-Q1-E1-H8

<400> 1428

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tgctgagtat caagtttgtg tagatgtgtt cttaccaca cagtcataca cagatgttgc 120
ttcgatatca gttgttccca gtaccactgg tggccgggtt tactactatt ttccattttc 180
tgctctttct gaccagcca aactcttcaa cgatctcaga tggagtatca ccagacccca 240
ggggtttgag gctgtcatgc gtgtcaggtg cagtcagggg cttcaagttc aagactattc 300

tggcaatttc tgcaagcgcg tccctactga tattgatttg cctgtgattg actctgacaa 360
aaccataatg gtttccctta agcatgatga t 391

<210> 1429
<211> 394
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-033-Q1-E1-H9
<400> 1429

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ctggaaagca atattataag agttatccag agcgatgtta taaatcacgt cttactgaaa 120
ttatgctcga tgagaacagg acaggtgaat cttctcatag gggattttat ctttataatg 180
ataagcgaca agcttctcca gatcctgata tcataaagta tggtgagaaa tcaagaaaca 240
tggcagctga tgaaattaac agacaaggac attgtagaga tggatcatct tcccgtgggtg 300
aatgaggcct gccgagtgt ggatgaggga attgactga aagcatctga ccttgatgta 360
gcatccatta tgggaatggg cttcccttca tttta 394

<210> 1430
<211> 431
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-034-Q1-E1-A12
<400> 1430

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gaatttcaaa aatgaggaaa aactcaaatt gaagattttc aacttttggt ggtggcggtga 120
cccacggtat aagaatgatg atttcagaca ccgcgtacaa ttttcgtagg gctctgagaa 180
tcaagttatt cgtaatttc ttcacactta gaggggttaat ctttactgat tgaagaaaaa 240
cgttacgtgt gttgcacatc aaggtcataa attttgcata agtggttagga tgtgtgtcct 300
tttcaaagga cattcgaaga ttataggata ttagctcaca ccgcaacttg ctaaactctct 360
tctcatccaa gggctttgtg aagatatcat ctagctgggtc ttcagtcttc acatgctcaa 420
tagatatgtt g 431

<210> 1431
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-B11

<400> 1431

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 catgcattaa aattaatcaa caccgaatgc aagcatgagt aggatataat ccaccatgaa 120
 cataaatatc atgaatgcta tgttgatttt gtttcaacta catgtgtgaa catgcgccaa 180
 gtcaagtcac ttaaatcatt cagaggagga taccacccta tcataccaca tcacaacccat 240
 ttctcatagca tgttggcaca caaggtaaac cattataagc tcctagctaa tcaagcatgg 300
 cacaagaaac tatgatctct agttgtcatt gcaaacatgt ttattcataa taggctgaat 360
 caggaacgat gaactaatca tatttacaaa aacaaaag 398

<210> 1432
 <211> 404
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-B2

<400> 1432

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 ggctagcaca agctgggata cagatcgaaa gacgggtatg cctcctgccc tggatcctcc 120
 taaactactc ctgctggttg tccgcgccct gcacatagca gtaggcacct ccagtgtagt 180
 atgagtcac atcgacagtg gcgtctggct cctgggctcc aacatctggt cgtaacaacc 240
 atgtatataa aggggaaaaa agggggagaa aagcaaccgt gagtactcat ccaaagcact 300
 cgcattgcaag gaactacact acatatgcat aggtatcaat gaaaggggtg gtatatgtgg 360
 actgaattgc agaatgccag aataacatgg ggatagcttg tcct 404

<210> 1433
 <211> 442
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-B7

<400> 1433

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gtttcccacc ggaggcgaac tatttgtttc tgggtgacta tgttgatcgt ggcaaacaga 120
gtattgaaac gatatgcctt ctgcttgctt acaagattaa gtacccggag aacttctttc 180
tccttagggg aaaccatgaa tgtgcctcta tcaacagaat ctatggattc tttgatgaat 240
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ctgtggctgc acttattgat gacaagatcc tgtgcatgca tgggggttta tcacctgatt 360
taaagaacat ggaccagata cgtaacattg cccgtcctgt ggatattccg gaccatggtc 420
tcccctgtga tctgctatgg tc 442

<210> 1434

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-B8

<400> 1434

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ctctttacta cctttaagtg gcttcttttg ctgatcgggt cgagagccct tgaatccggc 120
atttaccgtt gtgttgctcg ggctcttttc cttgttttga cgtttgtttt tattacgccg 180
tggtctcccg ttgccatccc ttatttcgga tgtgctggga tcgctgggtgc ctttacgggc 240
cagccaacta tcttcacccg cgcaaaagcg ggtcataagg cttgttaagg ctgccattgt 300
ccttggtttt tcttgccga ggtgtctggc aagccactcg tcgggatgct atgtttgaat 360
gccgctaagg cttcggcatc cggacaatcg acaatttgat tcttcttagt gaggaatctg 420
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<210> 1435

<211> 433

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-B9

<400> 1435

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ccaggtgctt aaaccgaatc acaccgaaca agggagtacc ttgctctgat accaattgaa 120

agtgcctagt atcgactaga ggggggtgaa taggcgattt ttatgaaagt attcaaaaaca 180

tggaagtttt gaagacaaac gatagaaatg aacctattaa catgcagcga aaggtagact 240

acactaagca agccatagtc aagtatacaa tgaagtgaaa gcacgaagac taatagcagc 300

taggcagtat ggatcaggat ggaagatagt atgaagccaa ttagaacaaa cagtcacaca 360

gtgaagacaa acaagtaatg caagtaggca atgacttcac aaggaccaac tattgattaa 420

gaagaaggaa agg 433

<210> 1436

<211> 430

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-C10

<400> 1436

aattcgcggg tcgacgggaa tcactcttct gtaaaaaaaaa tgacagcaaa tctcgtgagg 60

gcaaagtttc tgtttttttac agcaagatca cattgacttt ctcccaagta ttcccaaagg 120

tcttacttgg cactttattg aaacaaaagc tataaaacat gattaatata gtagcataat 180

catgtaaaca cacaaaaaca gtaagggtaa atattgggtt gtctcccaac aagcgctttt 240

ctttaatgcc ttttagctag gcatgatgat ttcaatgatg ctcacataaa agataggaat 300

tgaagcacia agagagcatc ttgaagaata tgactagcac acttaaatat aacctacttc 360

ctatgcctag ggattttgtt agcacacaat ttatgggaac aagaatcaac tagcatagga 420

aggcaaaaaca 430

<210> 1437

<211> 61

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-C11

<400> 1437

tatagtgagt cgtattaaac agcaaatacac gttagggcag cctctccgtt ttttacaaca 60

a 61

<210> 1438

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-C6

<400> 1438

aattccccggg tcgacgggta ttagaataact ctatgtgctt cacttatatc ttttgagtta 60

tatagttttt gctctagtagt ttcacttata gagcacgggtg gtaactattg ttctctcatg 120

cttcacttag attattttga gaatcctaca aaacagcatg gtagtttgcc ttaacaataa 180

taggcattca agattagaaa aaggaaaaat tcttatgagt gtggttgatg ctatgagaag 240

tttgatgctt gataattggtt ttgagatatg gacatgatga tattagagtc atgctagttg 300

agtagtttg agatttgagaa atacttgtgt taaagtttgt gattccccgta gcatgcacgt 360

atggtgaacc gttatgtgat gaagtcagag catgatttat ttattgattg tcttccttat 420

gag 423

<210> 1439

<211> 398

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-C7

<400> 1439

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gctgtttgaa taaaataacca agatctgaaa ttcttaaatg ttatagagtc ttcacatagt 120

tgcataacta ttcaactact cattgatctt cacttatatc ttttgaggta gtttgatcatt 180

tgctctagtg cttcacttat atccttttag agcacgacag tggttttatt ttatagaaat 240

tattgatctc tagttcttca cttatattat tttcagagtc tttagaacag aatggtaatt 300

tgctttgggtt atgaaattag tcctaatatg atgggcatcc aagagggata taataaaaac 360

tttcatataa agtgcattga atactatgag aagtttga 398

<210> 1440
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-C9

<400> 1440

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 acttatatct tttgagtatg gctttataga atgcttcattg tgcttcactt atatcatttg 180
 aagcttggat tgcattgttc tctttacata gaaaacctcc attttagaaa tgctcttttg 240
 cttaagttat atttgttaga gcatgggcat atcttttgta gaaagaatta aactctcttg 300
 cttcacttat atccatttag agagatgaca ggaactggtc attcacatgg ttaatcataa 360
 aatcctacat aaaacttgta gatcacagaa tatgatatgt ttgattcctt gcaatagttt 420
 tgc 423

<210> 1441
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-D10

<400> 1441

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 atgacagtca gtttttagctt tctctactga ggtgctcagc ccagctcaac tggggcacaa 120
 tcgcagtagt tctcctagtg ctaccttagc caatatagcg gaacgtaagg caccaaaaaca 180
 taggagccgt gcaaaccxaa ctattgacct aaatcatgat tcagagccga tgcatatagt 240
 gctataagtt cgggggtgccg cacttggtgaa agtggttcgga cttctcacac catattgagg 300
 ggtactggag cccttgccgt atttgccgta ccatagtgtg cgggtgtagc atgttattaa 360
 tgaacatata tatgaaaaga gattaatgca aaagatagac aaaaagctat gcattgttta 420
 taaaa 425

<210> 1442
 <211> 417
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-D6

<400> 1442

attcgcgggt cgacggggga catgaggagc gcgaggaagg agaaggagg aggaaagaag 60
 agccaccatg gttctttttg tccgatgtta gactatgggc tatctttttc cataagccgt 120
 cttgcttatt cattggggct tctaaactag ttatgaaata gctaatttag aagtctcaac 180
 aaatctagag ggcaacttat attttaagcc ggagagaggc atcttatttt gtaagccact 240
 caaaagaact agccctacaa ataagataca cacatttaca cacacacata tgctaaatgt 300
 cacttgctcg aagatgaatt tggcactact tgattatgcg tagagcatcg acaacgcgac 360
 cegtcatggt gtcccatcgg agatgtgcct ggaacgagtc agagccaggc gagacat 417

<210> 1443
 <211> 423
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-D8

<400> 1443

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 ctagtggctt ctctcaagat agcataagta ttacggcggg tgaacaaatt actgtcgagc 120
 aattgataga tttgagcata gttatgagaa tatctaggta tgatcatgta tataggcatc 180
 acgtccgtga caagtagacc gactcctacc tgcactact actattactc cacacatcga 240
 ccgctatcca gcatgcatct agagtattaa gttcataaga acagagtaac gctttaagca 300
 agatgacatg atgtaagggg ataaactcat gcaatatgat ataaacccca tatttttatc 360
 ctcgatggca acaatacaat acgtgtcggt tcccctactg tcaactgggat cgagcaccgc 420
 aag 423

<210> 1444
 <211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-D9

<400> 1444

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ccagttgcaa tccgtgggat catggatgcg cacgttcgtg aaacgctatt tggcctatgc 120
aactttttcg acgtcatctc tcggaagtcg gttggcgtga ggcaactcag aaggctacag 180
gaagagatcg tggatgatact atgtgagctt gagatgtact ttccgcccgc attctttgac 240
tttatggtgc atctactggt ccatatcgtg gaggatatca tccaactcgg gccgacgttc 300
cttcacaaca tgatgccgtt tgagaggatg aatggtgtca tcaaaggata cgttcgcaac 360
atgtcacgtc cagaggggaag catagccagg ggctttctga ccgaagagtg catctcctac 420
tgcatgaat 429

<210> 1445

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-E10

<400> 1445

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gagcttcggt cgagggagta gatgtgtatt tatatgcgcyg ttcacgcggc tctggaacag 120
ccaaaggaga ccctgccaga gttcctgccg ggctcccat ggacgcagga agtggtttgtg 180
tcagagaagg tttcaagcgc aggaaggatt ggatcaaaaa ttggaacgat tgaatgaaag 240
aagaggaagg agattgtgtt ggatcaaaaa gaagagaaag aagacctggt ctgccgtgga 300
agggcatcga gctgctgtgc tctacaaagg aagaagcaag agaccggatc tgtttttttt 360
ttttgagggg tggagaccgg atctgctggg taacgcatca gcgtatcctt tttg 414

<210> 1446

<211> 423

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-E11

<400> 1446

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 aagaatcact ggtatagatg actcaaactc tgcttatgcc cgaggtggta gactggatat 120
 ggttgggaca agattgcaca gtgtgtctgc atcgtgtggc ctgccctttg agttcaatgc 180
 tattcatgct gctagccatg aggtttatat tcagcatctt gacataagac ctggggagggc 240
 tattgtagtg aattttgcct atcagctgca ccatactcct gatgaaagtg tgagcatgga 300
 aaatcaccgg gacaggatcg taagaatgat caagagcctg tcccctaggg tggtgactct 360
 tgttgagcag gagtcgaaca caaacacaag tgcattcttg ccaaggtact tggagactct 420
 cga 423

<210> 1447
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-034-Q1-E1-E5
 <400> 1447

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 ttggatgcta tgatcaattt gatacttgat aattatgttg agatatggag gtaatgatat 120
 tatagtcatg ctagttgggt gattatgaat ttaaagaata cttgtgttga agttggcaag 180
 ttctgtagca tgcacgtatg gtaaaagttg tgtaacaaat ttattgcatg ggggtgctctt 240
 ttgattgcct tcccttgagt ggaggtcggg ggcgtgcaat ggttaactcc taccaacctc 300
 ccccctagga gaatgcgtag tagtactttg cttcgagggc taataaaaact tttgcaataa 360
 gtatatgagt tctttatgac caatgttgag tccatggatt atacgcactc tcaacctttc 420
 aac 423

<210> 1448
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-034-Q1-E1-E6
 <400> 1448

taccgatcca gaattcccgg gtcgacgggc tactccagtg tgggtggtggg ggattgcctc 60

ttgggctgat gatgaacagt acaaggggaa gaacatcctc ctgaggttga ggtgttcttg 120
cgctctgtgt gtggatgagg atcactcaag atcagatgag atgcctccga atgagttatc 180
tcttacggtg gtggctagtt caacttatat aggccctggt cctctcccca aatattgagt 240
ggaaagggag ccaacaatgg ccaatttgaa aggggacagc tagtgtcacg accgggtttt 300
caataaaata attattgaga aaccaatccc tattatggat cagcgaggaa gaatccttct 360
cactgataga caatacattg gtcacaaaaa ataaaagaaa gaaaaaaaaa aaaaagcggc 420
cgctctagag ga 432

<210> 1449
<211> 411
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-034-Q1-E1-E7
<400> 1449

attccccggg cgacgggatg gcgaaagggt ggcctgagac ggtgaagcac gagctgcacg 60
agcacgagct cgtgctgacg cgccgccccca ggccatacgg ctgcgacggg tgccaagaga 120
tgggcacctc ctggctctac aactgcgcgg agtgcgactt cgatctgcac gccaagtgcg 180
cgctgggtga ggagaagaag ggagaggagg tgaatgggca ggagcatgcc gctgccccag 240
ctgggtacgt gtgcgaggga gacgtctgca ggaaggccta ggtagcggtta gcgttggtgtg 300
tgttccttgc cagctgaatc gtgtctgaat catgtcctgt gtggtgtgat gataaataaa 360
tcttgcaccc gatgatttgg cttgggaagt atttgcctgt gtgacattta t 411

<210> 1450
<211> 414
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-034-Q1-E1-E8
<400> 1450

aattccccgg tcgacgggat ctgctgagga aatgatgat gaggaggatg ctctggagaa 60
ggaagaggag gatgacagca gcctgaatga ggaagagaat gatgatggtg ctgagaacaa 120
ggctggagaa gaggatgctg tcgtcacaat cgtgggttgag gccaaaggatg agctgaagaa 180

gcctctgaag cgcaagggag ctgaggagga ggccaaagat gagaagaaga tcaagaccac 240
 tgctgctgct cctgatgtgg aaaatgcagc tgaagaagac accgagatgg ttgaaaagga 300
 ggaagaagaa ggtgcccaga aggctcagaa gaagcgcaag gggcgtgctg gggctgcagg 360
 tactgcagct ggcggcggtg agaggaagag ggccagccct gctgctgctg aaga 414

<210> 1451
 <211> 417
 <212> DNA
 <213> Triticum aestivum
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 <223> Clone ID: LIB103-034-Q1-E1-E9
 <400> 1451

attcgcggtt cgacgggtat gcacaaaaaa tgcattgaaa agtcagataa tgcataaaaa 60
 tgtccaaacg aaccccgaga aatcacaaaa aatcacacaa cactcctggt gttcaatggt 120
 gacacgagaa aaaaaattga aagcaataag aggcaatgga tatcatttcg tccacaaagg 180
 tgggacgttc cctaccgaaa accatcatgc ttgttgtgac aagctccggt ttgtgagaag 240
 catataccca tacctgcccc aaatgggaca aaatttgtac cacggcatgt tgatgccgct 300
 ctatgatagc atgccaaagt tcatgaattt cacacgagtt ttggaattac tagaatttaa 360
 aaaccaggca tctcaatggt ttgccggcaa tcaacggtgt cccggtgttt gaaattc 417

<210> 1452
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-034-Q1-E1-F10
 <400> 1452

attgccgggt cgacgggcaa aaagttccgg atgttccac agaataaat gggcaagaag 60
 aatctgatga cattgccagt gcttctgatg ctacggctgt ttctgaggag gaacatgaca 120
 agtctgatga aagccctgct tctacacctg ccgaaagtaa cgactcgact gctgaaattc 180
 ttttcaatcc aaatgtattt acggagtaca agcttgcgtg cagtcctgag gagattgaag 240
 ccgatgaagc tttgggttaa aaggttggtt cgtatctgct agatacgggt atccccgaag 300
 ttgttcagga tctttgtctt cttgatgtct cccctatgga tgggtcaaact ttaactgatg 360

tgctgcatag caatgggata aatgttaggt atctgggcaa agttgcaggc atgat 415

<210> 1453
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-F11

<400> 1453

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ccggcgatgt cctgcgcatg aaggagacaa agattccagt tatagctgaa agctttaaga 180
aagctattct gaaggaacat aaagctgcta gcgaagctac ttatggggta tcaacgggtat 240
tgtcttccgc aagtgtact tgtaggtcgc gcagcgaagg tctccttagc ttactcaatg 300
aagagagctc ctacaatata ttgaagtttg aaattggctc gtgtgtcttc atagattcat 360
tggggagcag ccataatatt gagttggata cttttgaacc accaaaagcc gacctgctat 420
tgccattctc tgcgaagctt a 441

<210> 1454
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-F12

<400> 1454

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tatactgggt cggccccttg cagtgaaggt aaaggcctaa tccagtcgtt gtggaattgc 120
tagggtttcg atgaccaggg agcgaaccct ctatgcctgg ctctcgagtt gttgtttctt 180
gtccctaaac cgccgcgggt ggtcccttta tatccacagg ttgacgcccc gtgggtttaca 240
gaatccccgag ggcggctcat aaatgtgtcc ggctcggttt ctacctttct tatcttacia 300
cacaagttac atatgatgtg gtggtttatg tctacaggcc ataaccggcc tctgggcccct 360
gggccttcgt aaagcgccac actccttgct ttcattgggt tcaaatatga ataactca 418

<210> 1455
 <211> 392
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-034-Q1-E1-F5

 <400> 1455

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 taggaaaaca tgactaaca tgtgatcaac acgacttaca tcataactac ctacatatgc 120
 atcattatca acatcggggg tgggtggagtt tgactgcac atgccagctt ctactcagtg 180
 gccatcctaa ctactactgc aagtaactct ttgacgtgg cacacacat tccacatatt 240
 caccatatca atacatcact atggaacctg ctcccgcttc cctattacaa agccatccat 300
 agcactcaca cttatcttgc gacttttaca gttccactt tcacttgtct atgaactgtt 360
 atatgcaacg cacaagtcct ttaccgtgga ca 392

<210> 1456
 <211> 423
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-034-Q1-E1-F6

 <400> 1456

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 actgatgtta ccatggcgtg agcactgcat ttcttctcct ctctccactg tctttgtgca 180
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 gacacggcgc cagcatcact atccaccgca gtcgccatgg tccgggtgcac aatgcatttc 300
 ttctcccctt tcctctgcta gctcttaacc atgtgtgcta agtgcaagtg ctagctctta 360
 atcatacccc atgcggggcaa ccaaacaacg tgtagttgca gtggcgaacg caggaataat 420
 ttc 423

<210> 1457
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-F8

<400> 1457

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tgtttggcat ttcccagaaa aagtgtacga aaatgaagac tctttgcgtt tgtgtgccga 180
gtcagcccta aaatctgttc tcggcggaact tgacaatata tattttgttg gcaacgctcc 240
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cttcttcaag tcgcaagtga tcggcaccac gcatttggac atcaggaggt gcgaagacca 360
cgcgtgggtg accaaagctg agttgctgga atattttccg gagcacaagg atc 413

<210> 1458

<211> 303

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-G1

<400> 1458

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aggaggcata gcaacctgg tgctgttctt cgttcacact caacgtacca gtgagacgcg 180
tctttgcgtc atcgatcggg ttatgtatat ctgctgcact gctgtcagtc atggggcttc 240
gcttcaggaa gtccggaaat atattccgca gccggcgta tgtcccgctt tgccgtgggtg 300
atg 303

<210> 1459

<211> 409

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-G10

<400> 1459

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tcgatctcca ctagagttat cccaagtttc acttcacatc gtgatgttgt tttacctttt 180
 tttcatgtcg tcgtcccgtt gcttgctata acggacagcg ctccctgttg gcgccgccgc 240
 cggcgggggt ggtgccctgg cggcggatgg tgtatgtcct ctgccgccgg gtgctcccct 300
 gcttgtaact agatggttgg ttactctttc cgtccattgt caccggctaa gattgtgata 360
 atatcaatct gggtaatgtc aaaagtgtcg tttcccacgg aaataaaaa 409

<210> 1460
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-034-Q1-E1-G3

<400> 1460
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 accttttccct attgtattat cagctgtgtg acgagaggat agaccgacca atctgaagct 120
 gctactccct tttgtcccta agcagaacaa gttggcatgg agcagtctgt tctaaaagta 180
 atgtatccat atgttactgc caatcaggat agggacatga gttttaactt cctctgggtg 240
 tgaggagata ataaagaagc tgagagatcg actgtttgag aagcgggttc aggagatcaa 300
 agccaacaac aacctaggct ttgaaaaaga tgtttacaat gaaaaactga ggaagttgtg 360
 atggactgaa agatttgctt gaagcanagg catccacctg ngatatatat g 411

<210> 1461
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-G5

<400> 1461
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 caccctcgcc tacgccgcgc tcgtcggagc tgggtggcgta atgggttaca tgaagagcgg 120
 aagccagaag tcattggctg caggaggcat atcagccctg gtgctgttct tcgttcacac 180
 tcaactacca gtgagaccgg tctttgcgtc agcgatcggg ttaggtatat cggctgcact 240

gctgtcagtc atgggggtctc gcttcaagaa gtccggaaag atattcccag ccggcgctcgt 300
 gtccctcctt tccttgggtca tggtcggagg ctacgcccac gggattatgc gtagctcgca 360
 tgcgtgatgc agtcagtgcg gttaccatat gcacctccgg acttagactt gcgagttcct 420
 tttccttttt 430

<210> 1462
 <211> 420
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-034-Q1-E1-G6
 <400> 1462

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 ggcgaggcct tcaacgggaa gataccaag acggcacgat cccatggcaa gaagttccag 120
 gtctcgatcc agcaggagat gtcacgcatt ctgggtaacc ttggctgggc ttacatgcag 180
 cagaacaact atgaagccgc tgaattgggt tatcgaaagg cccagactat cgtacctgat 240
 gccaacaggg cgtgcaacct cgggctgtgc ctgattaagc agggcagaca tgaggaggca 300
 gtgcaagtac tcgaggacgt cctacttcgc agaattcag ggttgatga cgacaaggcg 360
 gttgcccag ccgagcagct cctccgtgag ctcggtccga caacacatgt ttcacgccc 420

<210> 1463
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-034-Q1-E1-G7
 <400> 1463

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 aagctgatga acgcttactg cgaccgtcag tctgtggatc tcaactccat tgctttcctt 180
 tttgatggtc gtaggctccg tggtagcag acccctgatg agcttgagat ggaggaaggc 240
 gacgagatcg acgcatgct tcaccagacc ggagggtgct ttctggccc ttagaaggag 300
 cttgctgcag cctggctggt ctatgtcgta tgctaccttt agaactagag taaaatgtaa 360

gaagtgaaag aacttgtgag gctatgggtc tgtgccatag cctgatggg ggtctggagg 420
tg 422

<210> 1464
<211> 453
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-034-Q1-E1-G8

<400> 1464

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ggaaaaaccg tactctaact gatttgggta acgtcatgtt agatacatcg ggtttatcca 120
aggcatggtg gggggagggt ataatgacat catgtcatgt cctgaataaa gttccgacaa 180
aggataacga gatcactcct tatgagaagt ggaccaagag aaggacaaca ctctcgact 240
tacgtacttg gggctctgctt ggcgaaagtt aatgtgccga tccccaaaaa gcgtaagctt 300
ggaccaaaga ccgtggactg tgttaatttg ggctacgcta tgaatagtgt tggctataga 360
tttctagtag tgaaatctga ggtacctgac atgaaggtcg gtacaattat ggagtctaag 420
gatgctacat tctttgaagg acatttcccc atg 453

<210> 1465
<211> 385
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-G9

<400> 1465

aattcgcggtg tcgacgggga agggcaaccg cgcgctgcgc gacgcagcaa tgatgggtgg 60
ccgccatgtc ctgcagtgtt tcttcagatc tgaattatga acggggtgag aaagaagaaa 120
gcgaactgga tggacgagga tctacgggt cgtggtgggc taatcgggag gctagggtgc 180
gaccggcga aattttgggc cggcgacccg gcgccgatca gtcgcctttt ttctggctga 240
tgtatgcatg cttttatagt ttgagcgatg gtggttcact tttaagctaa cttgggtgat 300
tcgttaccca aaattgtacc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ataaaaaaaa 360
aaaacaaaaa aataaaaaat gaaaa 385

<210> 1466
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-H5

<400> 1466

taccgatcca gaattcccgg gtcgacggga gattaatatg atggaaaata gacccggggg 60
 ccatagggtt cactagtggc ttctctcaag atagcataag tattacgggtg ggtgaacaaa 120
 ttactgttga gcaattgata gaaacgtgca tagttatgag aatatctagg catgatcatg 180
 tatataggca tcacgtccgc gacaagtaga ctgaaacgat tctgcatcta ctactattac 240
 tccacacatc gaccgctatc cagcatgcat ctagagtatt aagttcataa caacagagta 300
 acgcattagg caagatgaca agatgtagag ggataatctc aagcaatatg atataaaccc 360
 catcttttta tcctcgatgg caacaataca atacgtgtcg tttcctcttc tgtcactggg 420
 atcgagaaat ttaacttggtg tttgaataaa 450

<210> 1467
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-034-Q1-E1-H7

<400> 1467

attccgggtc gacaggacaa aatagacggg gcaagcatcc gtactatgat gcgatgcacg 60
 cgatacgggt tcaactgtgtc ggtggaaaca tcaaacttag ctgaatttct tttcaccttc 120
 gtcagttata tactcactag ctgaactctg tcccacagcg caactgttgt acgtgcatac 180
 ataggatgta tggcttgtca taactaatta tgacttcata tgttgcctaa aaaaaaaaaa 240
 aaaaaacaaa aaaaaagcgg ccgctctaaa ggatcaaacc gtagctctac atgatataaa 300
 cttacgtact cttccatgcg agtctcatag ctcttactac actgtcacct aatttcaatt 360
 catcggcagt cgtataacac tgtcgtgact ggg 393

<210> 1468
 <211> 420

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-A3
 <400> 1468
 cggttcgacg gggcaccaca cagcaatcat gtcattggagg aggtgggttg gagcagtgag 60
 tgagtggggc aaggagtgc cagtaacagg gcaggtatct ttctgtgcaa gggaccactg 120
 ttggcatgat ttatcaacag tctgcaatca agcaaagcaa aacgtgggta ctgggtcaat 180
 ctaaaccatg ggagtgttcc agaagaagca caagacactg tgaataaatt tattataata 240
 attgatcatg accactaatg accaacctta gcattctgga acaagaaaag gacataatac 300
 agcttacata aaacctacac ccatgcgacc atccgatgaa tgtaagcaca gcatgtcagt 360
 ttcactttca acttatccgt gggacatagt atttccttgg cagaaaatgg gaaaaaagat 420

<210> 1469
 <211> 365
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-A6
 <400> 1469
 ggtccagaat tcccgggtcg acgggatgac gaaggtcatc ccctacgcgt ttgtcatagg 60
 ctctatacgg tatgccatgc caactaccgc acctgatgtg tgccttgcca catgtctggc 120
 aagagggtac atgggtgatc caggagtggg tcaccagata ccagtcaaaa ttgaccctgg 180
 agtaataacg acatgtttct cgattatgga ggtgataaaa agttcggcgt aaagggttac 240
 atcgatgcaa gctttaacac ctatccgact gactctaagt ggcataaccg atatgtataa 300
 tggagcaact agttggaata gctccaagtg gagcgtggaa gcagcattta taatatgcca 360
 aagca 365

<210> 1470
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-A8
 <400> 1470

ggtccagaat tcccgggtcg acgggtatgt gtattgcttg gagcgctgtg tattatatta 60
 gtctttgctt tttagtttac cacaatcatc cttgatgtac acaccctttg ggagaagcct 120
 atttgattag aatttgctag aatactctat gtgcttcact tatataatttt gagcttgata 180
 gtttttgctc tagtgcttca cttatatctt ttagagcacg gtggtgtctt aattttgaag 240
 aaattgctag tctctcatgc ttcagttata ttattttgag agtcttttag aacagcatgg 300
 tattttctat tatcataaag ttggtcctag aatgatgagc atccaagttg agtataataa 360
 aaactatcat acgaagtga tgggatgata tgatcaactt gata 404

<210> 1471
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-B1
 <400> 1471

ggtcaagaat tcccgggtcg acgggattcg aaatttcggg aagcgcgcgg gacggagagg 60
 accgcagtaa acgggagcga ttaggcaggg gcgcctcgat tcttgcgcca cctttttcac 120
 cacgtaccga gcgcgcgact gttgcgggat ttgacgggat tgccttgccc cacaagtcag 180
 tcaactcgcg aataggccta tataaggcgt ctgggccggg gttttttgca cagtgaagtcc 240
 cattttcttt ctctctctct acttctccac tgcacccgcc tccactctcg gcgccatcgc 300
 ccagcctgag cgcaaccgcg tgcgatggcg aaggacaaga cggcggtctt ggagcgtgcg 360
 aagaaggcga ccgcgaaggc gaagggcaag aaaacgagcc ggggagggtc gtcgtccag 419

<210> 1472
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-035-Q1-E1-B2
 <400> 1472

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 tcatgcatat catgctcaat gcattagtga ttgagtcgca acaaaggatc tgactagtcg 120

taggggttct tgaagcaggt gtgctcccaa cccctcttct tttggttcgt tacagtacat 180
 gggtaattag aatgtgttgt gagataggaa gggtcttttg attgcttcgg cattttgggt 240
 acgtgccaga aatcgccatc agattgctca accttagagt gtaatatagg gacatcttag 300
 aaccacacag tttttggctg aatggtaaac ggagatgatg tattgtatac tttttctcgg 360
 gtaataacta agatgggtgat tctgacatgt 390

<210> 1473
 <211> 424
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-B3
 <400> 1473

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 actgtcttcc tatacaaatt gtttattttg cctaattttg gtagaatttt taaagtatca 120
 taagtatggg gaatgttcaa attattacag actgttctgt tttagacaga ttctgttttt 180
 gatgcatagt ttgcttggtt tgatgaaact gtcaatttat atcagtggat taagccatga 240
 aaaggttata ctacagtaga aacaatgcaa aaacaaaata tgaattgggt tgcaacagta 300
 cttagagtag tgatttgctt cattatacta acggatctta ccgagttttc tgttgaagtt 360
 ttgtgtggat gaagtgttg atgattgaga aggtttcgat gtgagaagaa ggaagagagg 420
 caag 424

<210> 1474
 <211> 385
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-C1
 <400> 1474

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 ctteccacta cctgagaatt ggaaggctga tgtcttacag gcacagcgac ctggacatac 120
 cccatcccat gaggttttac aggtttatct aacctcttgg cttgctaattg tgaacatcaa 180
 gacgagtaga attgacgaga tatttgagct tgttgaggaa gagatgcaga tcaaattgcg 240

ttgaagattt cgattcatag aatttaagt ggaaccattc gggaatgttc aggggttctt 300
 ttctattaac ggaagtgatt tacgcgaaaa tcatccactt agactcaaaa caaaaagagg 360
 ccgctctaga ggatccaagc ttacg 385

<210> 1475
 <211> 157
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-C10
 <400> 1475

caagcacctc aacaatttca ataaggcct cccctcccaa gcccacaaata gatggcgcgc 60
 accgccattc gagatggcgg cggtctaaa ggtccaagc ttacgtaggc gcgtatgcga 120
 cgtcatacct ctgcaatcat gtcaccaga ttcaatt 157

<210> 1476
 <211> 409
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-C3
 <400> 1476

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 tgtctgcgga aggtcggagc tttgtggatg gtggcatgaa ggagatagaa gctggagggtg 120
 gaggatacag aagaggggca aatgatgact tcatggttta tggacaggac aactcaatgg 180
 acaggaggag ctcttggac ccccttgccg aggcgcatta caagagactc actcctctag 240
 aggaaaagaa gaatgtgcac agtatgggcg atgagtcctt catgatacct gttacctcca 300
 actcacagga taatcttgga gcagccggcc gtactgccat tgacatagat gccgagcttg 360
 gctcaagtgt tcagaaaaca tcagatgcta aggtcggagc tgaactttt 409

<210> 1477
 <211> 344
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-C5

<400> 1477

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agttaagtcc tctcagcgtg atccaaacaa atccaaaaac aattaatttg gaatggagggt 120
aatacaaaacc aaagtaattt gcccaacaat caccaagcca catacatgca acattgtacc 180
gagtaggcaa tcaaactttc ttttgacatt gattaggaaa aaaatggcat gacttcatgt 240
gcgaccacta aaactgtgtg agataccctt ttttgtaata gatgatgcgt catcaacaca 300
tcctgatagt gagctgtgtt tgaccctagg gatattgcct ctgt 344

<210> 1478

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-C6

<400> 1478

ggccaagaat tcccgggtcg acggggcccc gtaccctggg cgtccggatt catcgaagat 60
ttgtgtccgc cagccggtag agctaacgtc gagctcccca acaaaccacc cgtacttgga 120
attgatgcag tcatgtctta tctctgttag aagctactag gtgccatgga tctcaggctc 180
tcagctcaag ctccgtgtcg ggacgagctc tgggtgccctt gctcggcgag tactttcaga 240
tatgcacgtc gtcgatagtg gtgaatccat gctgcaatga acacaacaac attataggac 300
cccgaactgt agcttttttg acaaagggga tatactaata tcgtgaagat atcaattaca 360
cccgacctt gcataacac agacaataag catgcacaca accaaggaga agaaggattt 420
ttcgggacaa ataaaaaagg ggccgctct 449

<210> 1479

<211> 400

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-C8

<400> 1479

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tggagccaat ccctctgctg aggggtggtg tgatgatgag ggtgtcgatg accaggccgt 120

gaaggtggtt gacattgttg acaccttccg tcttcaggag caatctgctt ttgacaagaa 180
gcagtttatc tctcacatga agcgctacat caagaacctc tctgccaagc ttgaagggga 240
tgacctagat gttttcaaga agaattgtga gtctgccaca aagtatcttc ttagcaagct 300
caaggacctt cagttctttg ttggcgagag catgcatgat gatggcggcg tgggtgttcgc 360
ctactacaag gagggagctg ctgatccaac tttcctgtac 400

<210> 1480
<211> 388
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-035-Q1-E1-D10

<400> 1480

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agaccttggg aaggacttaa agacaataac tttgcaatgc taaatggcac gtgagcaaaag 180
gatatcaaga agcttttggg tgttggggaag cttggagctg atgcttcaaa taagctgatg 240
gttgtctttt ggagatgttt ctatgtttta tgctttaaag tcttttggct gtactggact 300
atttaaactt tgaactatgc tgtgatggtt gaactgatgc tggacagtta acggttatgt 360
cagangcaac tttataacta atgtgtgt 388

<210> 1481
<211> 422
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-D5

<400> 1481

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ggagtccatg tgtgacaaag acacaaagag tgtgtgtgcg agaggatatca gcttaaaatg 120
aggtgatagt gtgtgtgtgc acgatcgaga gggcgtgtct caagaaggga cgaaaaatct 180
acatagatac aaggagcgcg agagagacat gtacgcgata gtggaagcac gagtgtgcgg 240
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gtgcgaaagt gagagttttg tgtgtgtgtg tgagagagag agagacggta gtcgggaagg 360
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 tt 422

<210> 1482
 <211> 398
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-D6
 <400> 1482

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 gcttgctgag ccaccggttc ttgctgctcc aattgagaaa gagccgctat tgttgtatgt 180
 agccgctaac tcacgggctg ttagtgtggc aatcgtggtg gagcgcaaag aggttggcaa 240
 tgaacagcca gttcaatggc cggtttatta tgtgaatgag gtactgatcg aatctagaca 300
 tagatatcca cattggcaga agctcgtgta cggggtgttc atggcaagcc ggaagctcaa 360
 gcactatattt cagggtcacc cgatcactgt ggtagct 398

<210> 1483
 <211> 379
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-D7
 <400> 1483

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 cttgctgctc caatttagaa agagacgcta ctgttgtatg tagccgctaa ctcacgggct 180
 gttagtgtgg caatcctggt ggagcgcaaa gaggttggca atgaacagcc agttcaatgg 240
 gcggtttatt atgtgaatga ggtactgatc gaatctagac atacatatcc acgttgacag 300
 aatctcgtgt acggagtgtt catggcagtc cggaagctca agcactatatt tcagggtcac 360
 ccgatcacgg tggtagct 379

<210> 1484
 <211> 362
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-D8

<400> 1484

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 ccatattttc ttgttaagct gcacgggttg aatgctccaa taccttcttg cttaattaga 180
 acaagaaggt cccctgggtac ttcattttct tggatgaat aatacattac gagcgatcaa 240
 cctgtatgat gggtatcctt ggatggagc gtctcaatat aatctctctc tcagtgcaca 300
 tttagacact ctatcatgga tagataacaa tgcctactc gtgtctcttt ttctttccct 360
 tt 362

<210> 1485
 <211> 384
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-E5

<400> 1485

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 ccaaggaggc cggcgccgag gggaagacga ggggcaggaa gaagggcagc aaggccaaga 120
 agggcgtgga gacgtacaag atctacatct tcaagggtgct caagcagggtg caccgggaca 180
 tcggcatctc ctccaaggcc atgtccatca tgaactcctt catcaacgac atcttcgaga 240
 agctcgccgg ggagtccgcc aagctcgccc gctacaacaa gaagcccacc atcacgtccc 300
 gggagatcca gacctccgtc cgctcgctc tccccggcga gctcgccaag caccgggtct 360
 ctgagggcac caaggccgtc acca 384

<210> 1486
 <211> 449
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-E7

<400> 1486

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tgcaagtcgc gcagcatgca cgtatggtaa ccgttggttg acaaatttga agcatggggt   180
gtttctttga ttgtcttctt tatgagtggc agtcggggac gagcgatggt attttcctac   240
caatctatcc ccttaggggc atgcgtagta gtactttgct ttgagggtta ataaactttt   300
gcaataacta tatgagttct ttatgactaa tgtgagtcca tggattatac acactttttac   360
ctttccatca ttgctagcct cttcggtacc gtgcattgcc ctttctcaac cccaaaattt   420
ggcgcaaaact tcgcccgtgc atcaaaacc                                     449

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<210> 1487

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-F5

<400> 1487

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actaccggcg gcgatgaggg gcatcttgag ggcggtcgat cccagcggc gacagcgaca   120
aggtgcggct cttctcaacg gatctgcagg gatggtgcgg cctagcggtg attgagggtg   180
caaaatgcct cgccgacgt attccaccgg ctgatttggc cggaatcggg ggccgaggac   240
gggcggaact tgtggcgggc ggccggcgaa ggaggtgggc aaaggggcac gggctgaaat   300
gtccctccag ccaaagtctt cactgcgata tggggcaccg cagggacgag gcggaacccc   360
gcgaacacgc gggttagggc cgagtttttg tcgcgccctt caaaaaattt ttgcggggcc   420
aacggttggt tccgggttcg gtttggtg                                     449

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<210> 1488

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-F6

<400> 1488

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ttcaagcgag acgtaccaga gatgtatgac ggcaagtcgc atccgtcgga gttcctgagc 180
atctacacca tcgcggtgca agctgccggg gggcgggacg acaagatgct ggccaacgac 240
ttcccgtggt tgctcaagcc caatgtcaga tgctgggtca tgcacgtgcc ggacaactcc 300
atatcctcat gggtagactt atgcgatcag tttgtcagcg cctttacaag cggtcacaag 360
cctcatggcc aagagagcga ccttcatctg ctgcccaga agga 404

<210> 1489

<211> 455

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-F7

<400> 1489

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tgcgccgcga ttgcgcgagt gccacctctt cttctcaaat atattgaaga ttccacagat 180
tcagggtgctt gccgattctg atgagcagga ggttgtgcag caaattcagg agttctatgc 240
tgacttttgt gccattgac ctttccattt cactctgaat atacacaata accacatcta 300
catgcttcca acgggtggttg atcctcctgg tatgcaaagc ttctgcgatc gagctgttga 360
cggcatcgct tctgtcttcc tggtcttgaa gcgtcgccct gttattagat taaaaagga 420
catcaaagggt cgcaaaaagg attgcacaag aaact 455

<210> 1490

<211> 249

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-F8

<400> 1490

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agaagaagaa gaagaagaag aagaagaaga agaagaagaa gatgaagaag aagaagaaga 120
 agaagaagat gaagaagaag aagaagaaga agaagaagaa gatgaagaat ttgaagtaga 180
 tgaagtagaa gaagaagtag aagaatatga agaataatca gtagtagaag aagatgaagt 240
 tgattaatt 249

<210> 1491
 <211> 95
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-G4
 <400> 1491

ccgggtcgac taacctggct atattaaagc aaacgtgttt tggctcaaat caaaggcaat 60
 gtttaaagat gaggggtatta gtcaggagct tctta 95

<210> 1492
 <211> 330
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-035-Q1-E1-G5
 <400> 1492

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 ctaaaaaaat aataaatcaa acgatcattc agataacaag agattcaaag tgtataatag 180
 ataatggaac cacgattgcc agtaaaacaa aaatagatta acaaaagaat tgggtccacac 240
 gtaggttccc tatcaactct atggttatat cctacttaaa cgcctttcag tgggtcatacc 300
 atattctaatt ctgggggtcaa tttttttaaa 330

<210> 1493
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-035-Q1-E1-G7

<400> 1493

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gcgggtcctt caagctgatg tgcggcaaac ttcaccttct ccgcactctg gcacccctgt 120

gtggtcaact ctctagctgt cttgaggagc caatcatctg ctactatcgg ctcggtgcta 180

ctggaaagca ccggtggatt cagcctaaga aaatgggcta agtgatcaac aggtgggtgt 240

gggtgggtgt ggttggtgtt gttgttcccc tgattctgat tctggactag caactgcatt 300

aatgtgttct gccgtggat caactgggtg agctccagt gaaaggtaaa tccgaggtca 360

cgtctcgag gcactctgang gtttagaaaa gatgagattt aagaatanag gggg 414

<210> 1494

<211> 395

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-H1

<400> 1494

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cagcttctga aagtaattca gaagttaatg gtacaggaaa aaaagaggat atagttggtg 120

gtgcagagaa taatggtaaa agtacggaga gcttaacaga aaaaaatgag agtgggtgaga 180

taaatgagga cttggatgat ggggttagca aagagttgga aggtggacat gagcaatgca 240

atgaggttgt tcgtaaccaa aatagcgagg aagcatcatc attggtcaat gaggagtctg 300

ttgatgtaaa agcagctgac tgttcagagc acagcaaaac acgcgaggaa ggttcttcga 360

tttctaaaaa tgatgtgctt gcagctactg catgt 395

<210> 1495

<211> 454

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-H7

<400> 1495

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gcacgttatt aaggggggatg gcagttcatg aaattggcga ggcgcagcgt gggcgcgaag 120

gggagtgccg acgttggcag cgagcgcata tgtccatcat taaaacagag atcctcgagc 180
 tgatcaaggg cgggggatcg gaaccactcc tcaagcttgg ctcggtcatt gccgttgga 240
 cagaacttgc cgtgccaaagg cctctgattg ggccatgggtg actgccgagg atctgggaga 300
 acgcatccaa gcttttgcaa tagccatggc agagctcgtg ggtgtcaagg aggtcgagat 360
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 tgattggaag gagatttatg atgactgtca acat 454

<210> 1496
 <211> 253
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-035-Q1-E1-H9

<400> 1496
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 cctcgtacac tctctcctt ggggagctca ccaagcacgc cgtctccgag ggccaagaagg 120
 ccgtcaccaa gtttacctcc tcttagatcg cgtcgctgtg atctagtagc aaatgtagtt 180
 ccatgctgtt ggcttaatgc ttgtctgtgg actctgggta tctgcaagta atattagtcc 240
 tactgttga aaa 253

<210> 1497
 <211> 267
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-A1

<400> 1497
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 gcatttggat attgatctta atccgttcgt ctggcaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaac aaaacaaaaa aatattaaaa acaaatccgg aaaaaggaca agctaattgag 240
 acaaaacaag gggccgacca agaggat 267

<210> 1498

<211> 449
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-A10

<400> 1498

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 agcctgtggc caccgagaaa aagcctgtcg tcgccaacgg tgctgtcaag accggtgtag 180
 ctgcttgatc gcatacctga tcctcccagc tagccatgag gaacaaacgg acggtgctgg 240
 cgaaccaggc gagacatgca ggggcccaag taccgatcac caaagggtggc tggaaagcgg 300
 gttggatagt taggtttatt ccctagctct ctttttctcc tgatcatgct gtattatccg 360
 tatttcagtt tgcttagctc taaagactcc tcctatagtg gtatcatcgg aatcaccaga 420
 naaagagaaa agagaacctg tggcaagac 449

<210> 1499
 <211> 481
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-A2

<400> 1499

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 tattttatct tgcaatcttt acttttcaat ctatatcata aaaataccaa aaatatttat 120
 cttattatct ctatcagatc tcacttttgc aagtggctgt gatgggattg ataaccctt 180
 tatcatgttg gttgcaaggt tcctatttgt ttgtgtaggt acaatggatt tgtgtgtaga 240
 ctctactggt attgatacct tggttctcaa aaactgaggg aaatacttac gctactttgc 300
 tgcatacgcg tttatcttca agggaaaacc aacacagtgc tcaagtggta gcaagaagga 360
 tttctggcgc cgttgccggg gaggtctacg cacaagtcaa gacataccaa gtacccatca 420
 caaactcttc tcctcgcgcat tatattattt gccatttgcc tctcgttttc ctctcccca 480
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<210> 1500
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-A3

<400> 1500

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 gaacatgatc aggggggaaac aagcggagcg ctacgggtctg tgtgacaagc tcgctcatgc 180
 tcagagcctc aagggtcggtg aagggtggatc cacctcgctg cacaacggcc tggacctcaa 240
 acttggtatc aactaggaac ggggtgaaagc ttctggccgt ggggttctgc tctagtgttg 300
 cttttgagct cgagtgttat gtcagggtga aatattctgc aatttccttc gaagggttg 360
 tatgaacttg tangagacca ctgtcttatg agatgtttgg cttaagctgg actgggctg 419

<210> 1501
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
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<400> 1501

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 cgaagaaccg aagtttgatc agtacaagct ggcagctggt gatcgtatga cgcacgagat 180
 catcgaatcc gtgcagagtt gcgttgccaa acttaaagga ttacacagtt agtaaattaa 240
 gtttgttcca tgccagcagt ctcgaaaaga accagtaatc tacacaaaact gcattgtcgt 300
 tgcactgtcc aatggcgccg caagaatgca gttccatgc ccaaaacagg cccattcttg 360
 aaggagctta tggaaaatga tgttcttctg gaagaaatgt tgtgtaacta atcatgatta 420
 agccagcatc tggtaggca c 441

<210> 1502

<211> 445
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
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<400> 1502

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atcaaatagg cgcccaacgg gctcctcaaa attcaactgg caggacaatc tgggctcccc 180
atattattga tagtaaatgg gaaaatccca ttcatttgtc tgccaaatta tcaaaatatg 240
aagaatccat cgtgaccatt ttttcggaag gatgcaaccg tcattttcta gtgtaacaag 300
cagtcaaatt atttgatggg taacaaatat ttccgtttta agggaccgca atgaacataa 360
ctcatggcaa agttccttca tttcccaata ttaaaacaac cccataggcc agtgtgttag 420
gcatcatcta ataaaanaat taaat 445

<210> 1503
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-A7

<400> 1503

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ttgtccatg gcgcggggcgc aatccatgga tacaaaatta gtatatTTTA tactatttac 120
aagtcgaggg cggggcTTTT cctgcgaggt acgcggcggg gcagttccgc ctagtcggtt 180
ccacatagac acgataagac gagggagtat gctgttgcac acgtagggct gtgtgatttg 240
acagtgagtt actgctggac aggtggggcc ccgtgatttg acttgccatt atcattttaa 300
ctgcggcgct acgaccggtg tgagtctcgc aattcctgac cacctccata caagtgcctc 360
tcgcaatgct ccaccattta gtagaggctg gctcttgcac gaaagcctac ttatccactt 420
tttccttgcc tctcttttct cca 443

<210> 1504
<211> 443

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-B1
 <400> 1504

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 gttgagaagg aaaagcagaa ggctgaggag gctgcagcag ccgattcaga nggactttct 180
 gagtccanaa agaagaatat cagcggtttt gtacaaaatc cctgacattc aattcttgga 240
 accttacagg atcaagatca ttgatattat tgagaaagga agagaagcag cccaacatta 300
 caatttcgat cttggcctca gttgctgtca tccttggtac tgtgctcttc agaaccattt 360
 tcggtggcaa gaagccattg gcacctgtga agcccggtgc cgaggccaag aagcccaatg 420
 ccacggaagc tgatgccgct gga 443

<210> 1505
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-B10
 <400> 1505

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 tgtttgtttg tttgtttggt ccgaaataag ggggacagct gagttcatcc tccattgtag 120
 ttgtaggtta acaaacaggc agatttcatt tgggaacata gatgagggga aatcaatcaa 180
 tcaagcaaag aaagaaagaa agaaacagat atcatcacgc acctaataca tcaatcaatc 240
 gatggatcaa tcaaagaaat taagcacgat gagacagatg gagagaggga cgacgggaga 300
 gagacgaact gtctttgggc ccgtggaagt ggacgaagaa ctctgtcatc gcgtcggtga 360
 tcatgtccac cttgtaatcg ctcatcatcc tgaccaatca atagaagcaa gctagctatt 420
 aaacatgaat caacaatcct c 441

<210> 1506
 <211> 340
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-036-Q1-E1-B11

<400> 1506

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agacagagag ttgtgctgcc tagccttggt tcgaaccctg ctatcgggaa cctttgccat  180
gttattacgc cggcctcttg aatttgcacc ctacctgcgc ggctgcatgc tgtcaatggt  240
ttggtatgtc tcgatcatga ttcttgatga caaatgtgga ttgaggtagc tcgtgacaca  300
gaccagctgt ctttggggcc gtggaagtgg ctgacgatct   340

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<210> 1507

<211> 463

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-036-Q1-E1-B12

<400> 1507

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tattcctcaa gtgatctctt cagaccgtgg tagcatcttt acatccaagt tttgggattc  180
ttttcagaag gccatgggca ctaacatccg cttcagcaca gctttccatc ctcaaactag  240
tgggtcaagtc gagcgtgtca accagattct tgaagatatg ctcagggttt gtgtcatctc  300
cttcggcatg aaatgggagg attgtcttcc ttatgtgtaa ttctcccaca acaacagttt  360
tcaagcaagt tcgggcaagg cccattcaa aattttgtat ggcaggaatt gccgtacccc  420
tctcaactgg tctgaaaccg gtgaacgtca gcttttgggt aat   463

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<210> 1508

<211> 462

<212> DNA

<213> *Triticum aestivum*

<223> unsure at all n locations

<223> Clone ID: LIB103-036-Q1-E1-B2

<400> 1508

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 gaggacaatt ccagcaagga taaaggacct actaaagtgg agatctatgc atcttttggc 180
 ggctcctga tgttgctcaa aggtgacct tcaagtgtg ctaacctcga gctggatcag 240
 aagctgttcc tcctcatccg aaaggtgtaa acgtgtcatc tacctgataa ccagcgcttg 300
 tagttcactc aaggctatac caagcctgtg atcgtttggg ggctaatacgt ccgagaccct 360
 tatgtactct tttggcggtg atacgactct agattggtag catggcttca ctgtatcacc 420
 agtcgcttat tcctgttccc ct 442

<210> 1511
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-B7
 <400> 1511

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 cgaacatttc cctcgcgctc acacatccac actgggtgggc cggcacaaga agaaggcgag 180
 cggcttgatc gtctgttcac gagaaaatgt gagcaccatt ttttaactgt aatttctctt 240
 ttggagttag agcatctaata atggatgctg ataggtttagc caagtttgca cattctcttg 300
 atcaggggct gacatgtctg gctagaacaa acccatgttc cgaattgtaa tccacatcat 360
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 tcgttcgttc 430

<210> 1512
 <211> 441
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-B8
 <400> 1512

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 aaaaaaaatt aggggttagtt catcatatcc gaaccaatct gagcctttgc ataatctttt 240
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 tctagtcttt tagagtttcg agttctggtc ataagttgtc acgccgccgc cgcaccatca 360
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 attacaccac aactgtcata t 441

<210> 1513
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-C11
 <400> 1513

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 gttatgctag tgggtgactg tggattagta gaaacacttg tgttgagggtt tgtgattccc 180
 gtagcatgca cgtatgggtga accgctttgt gatgaagttg gagcacaatt ttattttattg 240
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 cccctaggag catgcgcgta gtactttgtt ttcaatggct tgtanatttt ttcaataagt 360
 atatgagttc t 371

<210> 1514
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-C12
 <400> 1514

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 tgtgggtggtt ttgctttctt tcactaacgg agcttatgag atttcctggt gagttttgtg 180

ttgtgaagtt ttcaagtttt gggtaaagac ttgatggact atggaataag gagtggcaaa 240
 agcctaagct tggggatgcc catggcaccc gaagatactc aagaatagcc aaaagcctaa 300
 gcttggggat gccccgggaa ggcattccct ctttcgtctt cggttcattgg taactttact 360
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<210> 1515
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-C3

<400> 1515

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 tctcctggat gtggtttaca attcgtcgaa caatgagctt gtgaggactc agacccttgt 240
 caagaatgcc attgtgcaag ttgatgcagc ccctttcaaa cagtggtaac tgactcatta 300
 tggagttgaa atcgggtatga agaagaaagc tgctgcagct gccaagaagg aagctgctga 360
 gggacaagaa gctgaagttg ctgctgctgc cacag 395

<210> 1516
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-C6

<400> 1516

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 gggcaagagg agggccggcc ttgttgccaa ggtactgaga gataaaaaga aggggaaagg 180
 cgctgccttg ccgggaacaa ttcattcctag tagtgaatt ctgattaagg taccggatga 240
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tgcacctatt cttcagttac caagttcaag tacctgtagc cagccttgaa ggtggcttta 360
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 attaacaaat ttaacaaac 439

<210> 1517
 <211> 442
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-C9
 <400> 1517

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 atgaaaatgt acggccacga cctaagacag gtacgtacca gcatttttag atatgcacgg 180
 tgcatacctt atcataccaa cagtttcttt atgttcacgt tgactgacaa atcatttgct 240
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<210> 1518
 <211> 436
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-D1
 <400> 1518

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 gagcgggctg ttgagtattt atattctggt attcctgagc cgatggagat tcctgcacca 180
 ccaccaagtg ccagaccagc tgatcctgcc ctggcttcac aagcagctca acctgcagtt 240
 gcctcttccg gtcttaacgc tagccccttg gacctcttcc ctcaagccct gccaaatgct 300

tcagcaaatg ctgctggtga aagaaatctg gatgttttgc gtaacantgc acaattccga 360
aacttaactt ctttagtgca ggccaaccct caaatcttac agccattgct tcaagagctg 420
ggaaagcaaa accctc 436

<210> 1519
<211> 208
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-036-Q1-E1-D2
<400> 1519

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tggcagattt tagcaactta gcacaagtca tgcaatcaac ctacacatgc aattctaaga 120
gtatagcagc ggaatgtaaa acaatttcat atgaaggtaa acggacgagt ttgagaaggc 180
aaacacaatt ggagacacgg atgttttt 208

<210> 1520
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-036-Q1-E1-D5
<400> 1520

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tgtgtgcac gtgtgtgtgt gtgtgtcaga tattgagcga aaacaaacct aaggagagaa 180
atgggtattc atgaagagat tgtgcgggcc ttgaggtgcg caggggccga gtgaggggtgt 240
caaaatgccc gcgtttatgc atatgttgca tgcgatcgtg cgaggggacag acgaatcgag 300
agagatggtt gttgtgttac ggatgctcct ctctctctct gtctatctgt ctctctctct 360
ctctctcaga cacacacaca cacacacaca agtaaaatag aagaccgttc tctcatgtat 420
acacaacgta tcggcatc 438

<210> 1521
<211> 280
<212> DNA

<213> *Triticum aestivum*
 <223> Clone ID: LIB103-036-Q1-E1-D6
 <400> 1521

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gcaacctgaa atctcaccca catcatctct cctaataattt gacaaagtca tgatgcagtt  120
ccggtcccat cgacgaccag cattccttcc tacgtatgct gaaaggagtc atcgcaaaat  180
cgccttctct gccttgcatt gattcatgca aatgatacat ctccgggcaa tgtatgtgtt  240
gaaccgcgaa gtgacgtacg ttcggcacta agatcctccg                        280
  
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<210> 1522
 <211> 430
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-036-Q1-E1-D7
 <400> 1522

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actatgatta ctctgtttta taatctgtca gtaacgagtt ctacttgtgt ttttatttga  120
tgttatgtgt gattatgatt tcatatttaa gctttccttg tatgtacttt ttctgttcta  180
aatactttac tcaggataac aatactcctg cctactatat atttggtgct atctctgac  240
actacattct acttttgaat cttttagtag accgtgtggc cacaacttct gtttgaaatg  300
ccttgagaag tgggttaata gtggaaaaag gacctgtgga aaatgtcggg gaccaatcac  360
atccaaaatg gcttcgcagc caatgattaa agcagcggtg gttgcggata tccgtatggc  420
taggactgca                                     430
  
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<210> 1523
 <211> 404
 <212> DNA
 <213> *Triticum aestivum*
 <223> unsure at all n locations
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 <400> 1523

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tcaatctttt gctgggtgctg ttgctgttgt tgcattgttct gtggtaataa tgttgaatga 120
aacagtaact aaagcgttct tttagtaaag agaaaaaaag gtaaagagac tataaagata 180
tagtatattt gacttaactg aaaacttaag aaggatataa acaaataagc tggatttgca 240
ctaacatcgt tagatgaaac aaacattttc cataaattcc aaatgggtcc atccgtgaag 300
gacggaatta tagagcacca tagtttagtg tacttttaaa tacaagtggg ttctcatgct 360
atgcttataa tcaacctaga aagctgaata tgctacaaca caaa 404

<210> 1524
<211> 462
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-036-Q1-E1-E11
<400> 1524

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ggatgaactt atgaaattat ttgctactaa gagggtttct tctgaccta ctgatatgcc 120
tttgtctact ttgattgaga ataacaatgg atctatggat gtgaattttg ttggtaggaa 180
taatttttggg aacaacgctt acagaggaaa ttttaatcct aggccatata ctagtaatcc 240
ttctaataat tatgggaatt cctacaacaa ctcttatgga aattataata agatgccttc 300
tgaatttgag actagtgtta aagagtttat gaattcacaa aagaatttta atgctttgct 360
tgaggagaaa ttgcttaaag ttgatgattt ggctagaaac gttgatagaa tttctcttga 420
gattgattcc ttaaagctta agtctattcc tctaagcat ga 462

<210> 1525
<211> 189
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-036-Q1-E1-E3
<400> 1525

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gacgacgctg accgagcagt accccagcga caacttgggtg ctcaaggacc caatggcaat 120
caacaagcag ggggtggaacc cgctcaaaac aacttacttc aacaacaaaa acgtccggcc 180

gaacctcgg

189

<210> 1526
<211> 441
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-E5

<400> 1526

tcccgggtcg acgggtctgt caaacataag cctcattata tcttctctcaa aacagccacc 60
atacctacct atcatggcat ttccatagcc attccgagat atattgccat gcaacttcca 120
tcatcatcac atacatgact tgagcattta ttgtcatatt gctttccttg atcgtaagat 180
agctagcatg atgtttgcat ggcttgtctg ttttttgatg tcattgctac gctagatcat 240
tgcacatccc ggtacaccgc cggaggcatt catatagagt catatctttg ttctagtatc 300
gagttgtaat attgagttgt aagtaaataa aagtgtgatg atcatcatta ttagagcatt 360
accccagtga ggaaaggatg atggagacta tgattcccc acaagtcggg atgagactcc 420
ggaccttaaa aattaattaa a 441

<210> 1527
<211> 451
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-E6

<400> 1527

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aagccctaata cacagctgag atgggtacta tgtttctga gaatggtggc tatgtcgtct 180
gggtctcttc agctcttggg cccttttggg gttttcagca aggctgggca aagtggctca 240
gtggtgtcat agataatgct ctctatccag tcctttttct tgactatgtc aagtccagta 300
ttccagctct cgggggtggg cttccaagga cttttgcggt gcttatcctc acagctgccc 360
ttacttactg gacctacaga ggaataacga taggtggctg ggtggcagtc cttcttgggg 420
tgttcactct gctccctttc tttgttatgg g 451

<210> 1528
 <211> 315
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-E7

<400> 1528

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 gggttccatg cggcgctctg acccgagct aaagttccac cataggaagt ttgaccaatt 180
 tgaactttaa cagtatgcta attgcctgcc ctcaaatttg ggagcctatg gttcaaccgc 240
 cggtacctct aagtggacaa tcgtgttgcg tgtttgtaat caccatctgg taccaatccc 300
 attcacgatac acggt 315

<210> 1529
 <211> 378
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-F1

<400> 1529

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 cactgctgga tttgtactgc gtagctcaca cctcatagtc tggttgttgc ttggatgtgg 120
 atgttttgtg ggatgtgtga cccgtgaccg ccgatcgccg ctctgcttgc taacaacaag 180
 ttcatgtagc tgacctgtcc aacatcactg ttggcctaag tacaaaatcc ttgcatttgt 240
 gtggtgcccc tgagactgtc ctacatcagt tcaactagtgt acatttgcag aatctctctg 300
 ttttcttgcc aactctgaat aatttccttc tttgaacaaa ananaannnn nnaannaanaa 360
 aaaaaaagcg gccgctct 378

<210> 1530
 <211> 459
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-F11

<400> 1530

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ttgaaagttt ctccgtgatg tgggaaacca tgctccagtg ccgtcggcgc caacacgcga 120
tcatcaagtc actatcagcg gctgcaaact agaaacacca ttcgactccg agcctcgacg 180
ccaagccgcc ctctttctgt cgatcgagct cggcaaacta tgctcaaacc tccgaaactg 240
gatcgcatcc cgcagggcct acctgggcag cctcaacctg ggccttttcg gaaatttcag 300
tgcagaaata ccttgatctg cagaaaggcg tctgtgcggc taaatacagg cttctgagat 360
aagcttgagg tagtgattac tgcagcctgc ggggtgactg tactgtatat cggtgggtg 420
aaacactgcg acttcactct tgtcaatttt ccaagtaca 459

<210> 1531

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-F6

<400> 1531

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tagccacctc aacgcttgag gaaggaagag gtttaatttc caaagcagct gaaacagcat 120
taatcggcac actagcaatt aagctgctat ggttatgttt gcttgcccct acccttatat 180
atatgatttg caaggtaaaa aaatgagcag agagatcagg aatgctgggt cactgtataa 240
ttttgttgca tgttcagcaa cacgtaccag ttgatgcaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
ccccaaaaaa aaaaaaaaaa aaaaaaaaaa aaacgggccc cccaaaaa 407

<210> 1532

<211> 456

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-036-Q1-E1-F7

<400> 1532

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 gggggctatt tctgatggct ccatgttgct gctactagta gtgtgtgtgt gtgtgtttcg 180
 cgcttgctgg ccccatctt cgggggtgctg tggacttggt gcttggttag tttgtctgtg 240
 tcgggttaat tcggtagtca gtttgttgcg cgtgcgttac ggtgaactag aggtcttagt 300
 agcaggtttg caatatggct ggctcattgt ttcttcacat agtttgtgat gattgttggt 360
 gtcaagtgtt ccaccacctc gagggcaata ttggctttac cagtggactg gatgcatccg 420
 tggatgtgtt acgtgccatg atgtgcagtc ggcac 456

<210> 1533
 <211> 410
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-F8
 <400> 1533

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 agtccatgga ttatacgac tctcatcctt ccaccattgc tagcctctct aatactgcgc 120
 acatttcgcg ggtatcatac acccacgata taccttcctc aaaacagcca ccatacctac 180
 ctattatggc atttccatag ccattccgag atatattgcc atgcaactta ccacgttcc 240
 atttattatg acatgcttca tcattgtcat attgctttgc atgatcatgt agttcacatc 300
 gtattcatgg caaagccacc ttcataattc tttcatacat gtcgctcttg attcattgaa 360
 tatctcggtg caccgccgga ggcattcaca tagagtcata ttttgttcca 410

<210> 1534
 <211> 376
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-036-Q1-E1-G3
 <400> 1534

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gaacaacggc gtggagacgt acaagatcta catcttcaag gtgctgaagc atgtgcaccc 180
 tgacatcggc atctcctcca aggccatgtc catcatgaac tccttcatca acgacatctt 240
 cgagaagctc gccggggagt ccgccaagct ggcccgtac aacaagaagc ccaccatcac 300
 ctcccgggag atccagacct cgtccgctt cgtcctcccc ggggagctcg ccaagcacgc 360
 cgtctccgan ggcacc 376

<210> 1535
 <211> 434
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-G5

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 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaatttaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaagggg gccccccaaa gggttcaagc ctaatttacc cttgaaggca agttaaacc 240
 cctccaaagg gggccccaaa ttccattcca ggggccttct tttaaaaact tctgacgggg 300
 aaaaccccg ggtttcccaa tttaaacccc ttgaaaaaa accccctttt cccaagtggg 360
 gttaatacca aaaggggccg cccgattgcc ctttccaaaa atttgccac cctaaatggc 420
 aaaggggaac cccc 434

<210> 1536
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-G9

<400> 1536
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 cagaaacttt gcgcgcacga aatttgtttt ttaaatcaca gaaacgtgat tttgtgttta 180
 ttcgttttgc tgctgatcaa tagacaaatt ttccatgact gcctattttg gtagtatttt 240

tagagttcca gaagtttgcg ttagttacag attgctacag actgttctgt ttttgacaga 300
 ttctaacttt cgtgtgttgt ttgcttattt tgatgcatct atggatagta aaatagttta 360
 taaaccatag agaagttgga atacagtagg tttaacacct aagtaaataa agaagtagtt 420
 cat 423

<210> 1537
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-036-Q1-E1-H5
 <400> 1537

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 cgggtcaaagc catcgaatct ctcccagaca gtgacgatga agatgttctg atttcaaggc 120
 gcgctcttat tgatatcaca cagagagtca tcacaaggac aaaatagcat gattatacac 180
 aggggtggaga agataaggcg gagtttcacc acaggtgtag tgttccgctt ggaaatTTTT 240
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 ttcagggtaa ccattcctgg gaatcatcct aagtcgcagc tgtagtggtt ttagttactg 360
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 agactgtaac 430

<210> 1538
 <211> 410
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-A1
 <400> 1538

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 aacatacctg tagaattgac ttatactgct ggcttacatc accacaggca gtgaaggtaa 180
 caatccaatg atttataagc gcatgatttc aatggcgcaa tccaaaatat aatggcgact 240
 taacgtccaa agccagggcg gtttttcaaa cctcgcatat tcatccaata atataaaaag 300

ggccaattct agttctgccc ctaactcgaa cccaccactc agttttgccc ctaattttca 360
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<210> 1539
 <211> 423
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-A7
 <400> 1539

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 tagtcataga attgctccat gacgtacaac tcgctgccgg cgtccgagtc accaaacttg 120
 gcctcgagcg caaccacat gtccttgccg ttgtcaaacy acatatacga atccacaatg 180
 gagtcatcaa aaacacttag aagagcacct ttaaagagag tatcgatctt ctcgaaagct 240
 tccagctgtg ctgcattaag atcgccctca gtcttgccct tagtggcgtc atagcagcac 300
 atggtctgaa accagtaaac tgcctctgtg cgccacctct tatattggac ccccttaaag 360
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 tgg 423

<210> 1540
 <211> 346
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-A8
 <400> 1540

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 cactatctca gcgtagatct ccgtagttgt atgggtgacc agtcagacat tccgcatgtg 180
 cctcattagc tcgtgttctt tatcaatcta agggctcacc tgtcaatgga cattgactgt 240
 ataaaaattt atgcatacgt ggggaatcat gccacagact catcgctgca tcgcaccctc 300
 atcagccaca ctcagtgtga aataccttgc gtcagaccct catgct 346

<210> 1541
 <211> 344
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-037-Q1-E1-B11

 <400> 1541

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 cctcaatccg gcagggtataa aaccggccac aacattatat taaggacata tatatatattgc 120
 atgcaatatg aacaaaatgg ggtaaaaata aatcacttac agaacgtacc aactgatgat 180
 agatttgtcg agctcgcgca gattgaaaag ctggaacaat tcactcagat gaatttgcac 240
 atagtaatgt ttgaagtgat gctcatatTTT aacttccgca taaatatatt ctttggcggt 300
 tttatTTTTT atgtaaccct tgtaccattt cagcagacct ttca 344

<210> 1542
 <211> 396
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
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 <400> 1542

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 aatggcggag gatggtggca aggataaccc actcatcaag gctgcaaatt gccgcatatg 180
 caaggaaaag gacagcatca aaaatctcaa aaaaccatgt acgtgcaacg gcagtctgaa 240
 gtatgctcat aaagcgtgtg tgcaacgctg gtgcaatgag aaaggaaaca ttacatgtga 300
 aatttgccat gagcaatata agcctgngta cacagnaca ccacgtgttc aaccagatga 360
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<210> 1543
 <211> 292
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-037-Q1-E1-B5

<400> 1543

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gttgttgata tggcggatga tgggtggcgag gatgatccac tcatccaatc tgcagagtgc 180

cgcatatgcc acgaagatga cagcatcaag aatctctaga atccatgttc gtgcaacggt 240

actccagaag tatgctcata gagcgtctgt cgcaacgctt gtgcaatcag aa 292

<210> 1544

<211> 188

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-B6

<400> 1544

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agatgcgacg cgggactcgc cgaccgtgag ggtttttata gcaggctggt aagcagtggg 120

atgggggggg atgatacgtc cactttgcgg catgctgcta gagcgacatg tagtgcatta 180

tgggctgt 188

<210> 1545

<211> 261

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-B7

<400> 1545

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cccttacgac gccgaccatt accctgcgca ttggtattag ccacagaatc tgaactgtta 120

tccgccttac ggcttaccgt tgtttccatg acccgccggg ttatgctgct gccctttggt 180

gctgccgccc ttctttccct ttctgtctt ctcatcatca tactcagggt ccttggtact 240

atcggagtcg gcataattca c 261

<210> 1546

<211> 388

<212> DNA

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 tgtttatattt gcaactcccg ttttgagtta ctacttttag caactgaacc agtatcaaatt 300
 actgaggtgt tttctataaa cactagtaaa gtacagatca gtaacatgta gatcaaattag 360
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<210> 1549
 <211> 252
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-C6
 <400> 1549

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 tgttgcccggt gggtcgtctc gaggcgtgag tgagggatct cagcaggatc ctcagggtgcc 180
 cagagggggtc taagctcgca ttaggactcg ggcgtgccgt ctcgtgtcgg ttctattcga 240
 tggcggacgc gg 252

<210> 1550
 <211> 386
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-D11
 <400> 1550

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 tgattccaaa ggccaaccga acccggtcct tcaagggcgt ttcttagagc cctggagcat 120
 ttcgggtcca acagggcgac ctctctggcc aatgaggtcc ggaagctttg ccgggggtgcc 180
 atgaccaatg tcttcaccaa ggtggcgtag tggaaaccca acctcgactt cgatgccgcg 240
 ctggagagct tgccggagga tgcggacatt gcgacgctcg aggagcgat caagcccatc 300
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 ttctcatcgc cgctgcaagt tcttga 386

<210> 1551

<211> 429
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-D2

<400> 1551

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 gcaagaagaa ggccaagaag agcgtggaga cgtacaagat ctacatcttc aagggtgctga 120
 agcaggtgca gcccacatc ggcattctct ccaaggccat gtccatcatg aactccttca 180
 tcaacgacat cttcgagaag ctgcggcg atgccgcaa gctggcgcg tacaacaaga 240
 agccaacat caggtcccg gagatccaga cctccgtccg cctcgtctc cccggcgagc 300
 tcgccaagca cgccgtctcc gagggcacca aggtgtcac caagttcacc tctcttatg 360
 ctgttcgtct tctgtgtct cgtagttagc tgttcgggtg tgtttggtgc cgtgttacc 420
 tgtaagaat 429

<210> 1552
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-D3

<400> 1552

gggtcgacgg ctgttagaat cagcaatttg cgtaatgatg aaattgagaa atacttgtgt 60
 tgaagttagc aagtcccgta gcatgcacat atggtaaaag ttgtgtaaca aatttgctgc 120
 atggggtgct cttttgattg ccttccttat gtgtggaggt cgggggagcg cgatgggtaa 180
 ctctgcaa cctccccctt aggagcatgc gtagtagtac tttgcttcga gggctaatag 240
 aacttttgca ataagtatat gagttcttta tgactaatgt gagtccatgg attatacgca 300
 ctcttacctt tccatcattg ctagcctctt aagtaccgtg cattgccctt tctcaccttg 360
 agagttggtg caaacttcgc cgggtcatcc aaaccctga ttcgatacgc tctatcacac 420
 at 422

<210> 1553
 <211> 408
 <212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-037-Q1-E1-D7

<400> 1553

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cttgctgtaa aaaacagaaa ctttagcgct cactgaggact gctgtcattt ttatttgga   120
agtgcatttt agttaattat ttttgcagat gattaataga taaatgtctc acgtccagaa   180
atttatttta gaatttttgg ggttccagat cttgcgctag ctacagatta ctaaagactg   240
ttctgttttt gacagattct gtttttcgtg tgttggttgc ttattttgat gaatctatgg   300
ctagtaaaat agtttataaa ccatatagaa gttggaatac agtaggtata acaccaatat   360
aaataaataa tgagttcatt acagtacctt gaagtgatcc tttgtttt   408

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<210> 1554

<211> 349

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-037-Q1-E1-E1

<400> 1554

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acgatgaaat ctgccgtgac taatctatga cacttggatc tcatcgtgga gctaactcac   120
gatgggggtca cgatcgtggt cggcaagttc accggaggca aatgagatgt cgtgcggcgc   180
atgaccaata atcttgccgc aacgatggac accaatcacg tatgatagag tcccaggagc   240
tattcgatct aatatgggta tcgggtcccc gttgatggca tagacgtttc cattgccaat   300
acagcacagc cttctgcaa gccggacact cggacagact tcatccaca   349

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<210> 1555

<211> 372

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-037-Q1-E1-E10

<400> 1555

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gggtcgaccg gacccaagga cacaaatttg atttttgaac caatttatat gcactggagc   60

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atgtgcatgt agttcaaatt tgaattatgc acataaatgc aatgaaaact cagttaatgc 120
ataaaaaatgt ccaaacgaac cccgaaaaat cacaaaaatt gacacagcac tcttgtgggt 180
ctaggttgac accagaaatt ttttgaaagc aaaaaaaggc gatggaaatc ctttccgccc 240
caaaaggggg acatttccca acgaaaacaa caagcctgtt gtgaaaaact ctgggttggt 300
aaaaacatat acccaaactt gcccctaatg ggacaaaaaa tttaccaagg catgttgata 360
gcatgccaag tt 372

<210> 1556
<211> 342
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-E5

<400> 1556
cctatagtga gtcgtattac cacgcatgcg ggcgtgattt gcttctctgc tgccaaatgc 60
tccttaagat catgggtata ctgcgcacca tggcttaggg cggcgcttaa ttggtggagg 120
ggtcggtgat ttgggtggaa ggtgttgccg ctgcggtcgg ggcattgtgg atgtggaagg 180
aggaggacga tgggggtctg gtgtggatta cctgcctgga tagacgaggc cgagcagcat 240
tagcgagggt cactggcgag gaggcggcgc tgcaggcggg gaggtagggg tgcaacttgg 300
ggaggtacgc agaggtaggg gaagggtggc gtgtgaggtc gg 342

<210> 1557
<211> 281
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-E6

<400> 1557
ttacaacacc ctatagttag tcgtattatt gccatgtctt caggattcag tagctgttgt 60
cgggtatcct cttggtggag atactatatc tgtgacaaaa ggcgttgtgt cacgcagtga 120
ggtcagacca gatgcgcagt gaagatcaga tcgtcgtggg gttcacattg atgcagtagt 180
gaaggcagga aacagtcgtg gatcggcttt taatgagcag ggcgaatgcg ttggagtacc 240
atttgacgtg ttcaggtgag atgaagctga aagtattgga t 281

<223> unsure at all n locations
<223> Clone ID: LIB103-037-Q1-E1-F2

<400> 1560

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ggagcatctg gcctccctca tgaacttgta aaggagtga tagatttggg ggtgaggaaa 120
ttcaacgtga acacggagggt ccgcaacagc tacctgcagt cactcaagaa gccagaaaag 180
gacctgggttc aggtcatgga gtctgccaaag gaagcaatga aagttgttgt agcagagaag 240
atgcgctctt tcggatccgc aggcaaagcc tgaatatagc gatacaatga aaactggagc 300
cagcaacact ccatcattaa gtgttgcatg cccattttag cgatcctgct angcttgtga 360
cagcgaattg ccggaaccag tttcttaata aagcactgat acagttgcct gaagaaatta 420
agttgc 426

<210> 1561
<211> 313
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-F5

<400> 1561

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gggaataacta caggccgata caaggcaaga tggccagtca tgatgtgatc aggtacacaa 120
tttacatcag caatgtgctc gaccagtgac acgcggacat ctgcatctcc tccaatgcca 180
cgtccagcaa caagtccatc atcaagcaca tcatcgacaa actcacaggg gactccgcca 240
atctcgcccc ctacaacaaa aatcccatca tcacatagct gtacatccag acctccgtcg 300
tcctcgctct ccc 313

<210> 1562
<211> 301
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-F6

<400> 1562

caccctatag tgagtcgtat tatctcccgc acatggagat caggtcaaac atccggaagc 60

ctgagatggt catgtgagcc cagagcacag atatgcattt aggaaggatg ttgtgtggcg 120
 tcattgttcg agtggacact gtggacatct taatctatgt ggaacttgcg ggacttggtg 180
 gtctgatgat aatgtatgtg cattagtcac taccactgtt ggttcccatt gagatccacg 240
 tccagcgta ttacatcggt gtggggatat ctgcctgttg acttcatttt ctcggttcgc 300
 a 301

<210> 1563
 <211> 376
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-F7

<400> 1563

accctaaagt gagtcgtatt aggccttgga agtaactatc tcactgaag ggtgtagcag 60
 atggacggtc ttagtggtgc aaacgattga agcagtatgc gcttttaacc aattcattcc 120
 cagaatgaga tcaatgctac aggacttcag tacgatagga gagacaagaa attccagccc 180
 ttcaatttca acagtaacat cgtgactaac catagagggt tgacattggc ccgcaggggt 240
 gtgtaccact agcggagtgt ttatctcttc gtaatggatg ccatgcagga atgcaaattc 300
 tgctgatatg aatgaatggg atgctcctgt atcagataaa acggatgcgg gtactgaatt 360
 tacgaagagt gtaccc 376

<210> 1564
 <211> 316
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-F8

<400> 1564

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 aggagaagga gagtacgaaa cggcgtgcgc caaagtctat gggatccgcg cgcaagaagc 120
 agcctgccat cgctaacca gcagcggtag gaggaagggt tgatgtcggg gatgcaatgg 180
 acttgtcaca gtaggtgggt tgtgtgggtg tttgtttggg tacgagtgcc ctttgagatg 240
 acgagcatca cggattcggt gctctcacia gtttcagcgc atgcgatcca ccagcggagg 300

acggtaatag gaagca

316

<210> 1565
<211> 439
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-037-Q1-E1-G2

<400> 1565

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ccattcagta cagaagttcg tcatgcatac cgagagaagt gatcgatcga cctctccttc 120
tccgagagat tggtcgaaca acaagttttc gtatcatgta tccgacgcta ctggctacat 180
acatgtacaa tatgtataag atctcttaat taaaaacccc tagcatttga aatcaacttc 240
cacatgggat tctccggctt tactgatgac gtgatcaaga aagaatcccg ccaattcctc 300
ttgaattgct ttcatgcgat ctgggttctag gagttcattc cgcattctgcc acgtctaatt 360
tgaagaaagg ggctaattaa tacatatata tgaatgaaac tcaacagana tgatgggtgta 420
ataaaataaa aatgtgaat 439

<210> 1566
<211> 312
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-037-Q1-E1-G4

<400> 1566

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gcagcccgtg gacgacgacc gggagtagtt taggaggatc ccaggcagga ggcctgcgcc 120
tctttcgatc tgtatcccat tttgtgctag ctttcttaag gcaacttggt taacttaggt 180
cggtacccaa atattgttcc ttcggctaac cctccaataa ttaaccactt gtatccaacc 240
ctccaaggcc ccggccttga ataagaatcc ttgaagaact aatttaattg gtaaatttgt 300
gttgtaaaac ct 312

<210> 1567

<211> 399
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-037-Q1-E1-G5

 <400> 1567

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 gtcccgcact cgtggcctct cgacaccacc tgaggctcgtt ggcttcgcgg acggccacgg 120
 actcgttttc attaggacag gcaacacggg gttctccatg gatctcaagt caggccatgt 180
 ccgtaaggta tacacctgca ggtcaagaaa ctacgacgtc accgttggtc cctacatgag 240
 cttctgcact ccagatcgtg ctatgggcag actgccatcg ccatgaggac ccactgtcat 300
 cctgtaacaa ggacctgctg ctcttggtt gttgcataga tgacgctcca agtgttttgc 360
 .ttccaagctg gactgtctaa gtagttacca tgggtcaatg 399

<210> 1568
 <211> 340
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-037-Q1-E1-G6

 <400> 1568

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 tgacttgctt accaccacc cgataaggct tggacttgca ctcaacttct cagtgttcta 120
 ctatgagatc ctgaactctc cagaccgtgc ttgcaacctt gccaatcagg catttgatga 180
 agccattgct gagctggact ccctcggcta ggaatcctac acggacagca ccttgatcat 240
 gcaacttctt cgtgacaact tgactctctg gacctccgat aactcagagg aggggtgggtg 300
 atgggatcaa ggaagccgct tcaaattctt gagggagagg 340

<210> 1569
 <211> 330
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-037-Q1-E1-G7

 <400> 1569

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 taacaaatct gcagccctgt tttggtttgg gtttaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aggaagcaca aaaagataaa 240
 agactaaaat aagcatacat gaaacatcat aacacttcat atagtgtgac caaaattcaa 300
 ttcaggggcc gatcatttta caaggtcttg 330

<210> 1570
 <211> 422
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-H1
 <400> 1570

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 caggcatatg aaaggcgagg atgtgaactc cctgcagccc aagggaactga tcgccattga 120
 ggaagctctc acgaacggcc agaccaacct cagggacaag atgatggacc actggaagat 180
 gcacaggagg aatgagaaga tgctggagga ggagcacaag ctgctggctc tgaggatgca 240
 ccagcaggac gacctgagca gcggcatgag ggagatggag ctcgggtacc atcagggtag 300
 ggatttcact tcccagatgc cgttcacctt ccggctgcag cccagccacc ccaacttgca 360
 ggaagacaag taggccaccg aatcctgcca cggcctgtgt caactgaagc tcctctacct 420
 gc 422

<210> 1571
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-037-Q1-E1-H9
 <400> 1571

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 gattagctgc tatagtga aa gtattgagaa atacatcatt ttatcacaca agcaagcttg 120
 cagatgctga catcgtgttg ttactaaaaa tattgaagtc ttggccttca cagatgatgt 180

ttccagtgtg tgattttctg atggtgtttg tgttgcatcc tgacggggct actttacgtc 240
 ttaagaccat cgaaagtgga aacgatgtag ccatggaaac cttccgtaag gctgtagcaa 300
 tacctgtgca ctcaccgaat gtgcttacia tctcaaagc agttactaac ttatttgaca 360
 actcatgctt acaccaatgg ttgaaaaccc attgtgctga gatt 404

<210> 1572
 <211> 475
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-038-Q1-E1-B10
 <400> 1572

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 gcgaccaagg aggccggcgg cgaggggaag acgaggggca ggaagaaggg cagcaaggcc 120
 aagaaggcgg tggagacgta caagatctac gtcttcaagg tgctcaagca ggtgcacccg 180
 gacatcgcca tctctcccaa ggccatgtcc atcatgaact ccttcagcaa cgacatcttc 240
 gagaagctcg ccggggagtc cgccaagctc gcccgctaca acaagaagcc caccatcacg 300
 tcccgggaga tccagacctc cgctcgctc gtctccccg gcgagctcgc caatcacgcc 360
 gtctctgagg gcaccaaggc cgtcaccaag ttcacctcat cctatgctag tctgccgtgt 420
 ccgtgaactg atggctgcat tctgtatgta gtttagcagt accatgttac aacct 475

<210> 1573
 <211> 371
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-038-Q1-E1-C7
 <400> 1573

ggcttgctgt tgatgtagct gttgctgttg ttgttggtgt tgttggtgtt gttgttggtg 60
 ttgttggtgt tgttggtgtt gttgttggtg ttgttggtgt tgttggtgtt gttgttggtg 120
 ttgttggtgt tgttggtgtt gttgttggtg ttgttggtgt tgttggtgat gttgttggtt 180
 gtagttgttg ttgttggtat tgtagttgta gttgttggtg ttgttggtgt tgttggtgtt 240
 attgttggtg ttgttgctgt tcttggtgtt gttgttggtg atgttggtgt tgttggtgtt 300

gttggtgttg ttgttgttgt tgttattgat gttattgttg ttgttattgt tgttgttgtt 360
gttggtgttg t 371

<210> 1574
<211> 472
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-038-Q1-E1-D12

<400> 1574

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gataattcct cacaccaatc catcattacc cacactcgct atttataaga tatagtaata 120
tattctaaat ttatgataac agcacctatt tttatatttt agttctatga tatcatgcga 180
agttatcctc ttcataccca caacgtagtt ttatttctcg gttctagatg gaagcaaacg 240
tttggtgtat gtagagtcac atcagtggca gataggactt gagagaacat tgatcttacc 300
tttagctcct tgtggggtcg aactccata cttatcactt ccacctttgg aaatttctat 360
gatgattcct tgcacttagg gattatcact atccaacatg catcttaaag tattaatgtg 420
gagatattat atattatctt caccctgcat tcgaaggaca aatacacaat ca 472

<210> 1575
<211> 347
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-038-Q1-E1-D8

<400> 1575

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tcaaagccag ataaatgctt atctcatatg acgctgctca gcggatgaac taagtttaac 120
attggtgaac catatctatt cctcatccgt gagtactggt cagtcatact gtggctgttt 180
ggctccaatt ttggaagtca attttgtttg tctgagacat cttggaaaga acagtgtaag 240
aatgagctct aaaagatcaa agcttacata aaagtggacg ctctataaga tctaagctta 300
cgtatccgtg catgccactt catagctctt cgatattgtc acccaaaa 347

<210> 1576

<211> 281
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-038-Q1-E1-D9

<400> 1576

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 cgccggaatc gaagtgaaca gaggcggcgg ccatggcggc aatggggggc acagagagct 120
 ccgggagctc gggctagtgg tcaaggaggg gaagaggagg gtggtgaggc tgtggtgtgc 180
 tcgancgagg caggggatgg ctatttatag ccggggcgag agggatgggc tcgggtgctg 240
 tcgtgcgcac ccggccgaca cccgagctcg gcctcgctcg c 281

<210> 1577
 <211> 470
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-038-Q1-E1-E10

<400> 1577

tacggtacga cattcccggg tccacggggc attcattata acctgaagga cggggcatat 60
 actcaatatc ataacgttcc caagtcagac ctttgatac catcctagta cccagacaga 120
 aagctgcac agttcgcggt gaagccgcca atgggtaata tgagtaagct agtttggact 180
 gtctcgctcg ccaaccgca gggccgtagt cgagttcacc ctttggtata cttatagctt 240
 taactatggg acagtcttgg tcatcgagc taggttcata tagtttctgt tgcttggcta 300
 gctcgacaag ggatagtcga tgtgagggaa ccgtgggca attctgcgcc atctctatac 360
 aagaaaaata tacgtgtgtt ggtacagtta caagccatgt taaaacagc aaaaacaagt 420
 gaccatggta aatgaatgga aattttacca cgagggaat agtccgagcg 470

<210> 1578
 <211> 485
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-038-Q1-E1-E2

<400> 1578

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cagcaatcct tgagtacctt actgccgagg tccttgagct ggccggcaac gctagcaagg 180
atctcaaggt gaagcgtatc acccctcgcc acctgcagct tgcgatccgt ggagatgagg 240
agctggacac cctcatcaag ggcaccatcg ctgggtgggtg tgtcatccct cacatccaca 300
agtcactcat caacaagacc tccaaggagt gaatgaaatg caataacggg tagttgttgt 360
gtgttgtatc ttcgtgatcc ctgtgtatgt tgtgctatct gttacgtgtt gctattatca 420
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taaag 485

<210> 1579
<211> 455
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-038-Q1-E1-E8
<400> 1579

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agcggcaagt acacgctcgg ctacaagacc gtcctcaaga ccctcangaa ctccaaggca 120
nagcttgtga tccttgctaa caactgccct ccgctccgca agtctgagat tgagtactat 180
gctatgttgg cgaagatcac tgtccaccac taccatggaa acaatgttga tttgggaact 240
gcgtgtggta aataacttccg agtctgctgc ctgagtatca tcgaccctgg cgattccgac 300
atcatcaacg caacaccagc tggccagtaa acctgtgtat gccattttca gtgtctcgtc 360
tgatgcgtca tctaagggtg ttctagagtg tagttcttgc tggacttgat ttgggtcttgt 420
gtacatcatt tatcagtcaa tcaagtttga tggga 455

<210> 1580
<211> 456
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-038-Q1-E1-G10

<400> 1580
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 gttgaagtgc tatacaacct ctgtcacact ctccaggaga tctgcaagg cctctgcaga 120
 atgccacagt tgggtgagct tgatgcaccc ttgagacca aacacacact acaataaata 180
 tggcttacct gcgggtatct gctccacttg ctgggtgcatc tcacagtcgg cccggggccac 240
 ggtctggagc tcggagtgcg ctagctggag cttcttgagc tcttctttcg cttgcttctc 300
 cttggactga agtttatcgc gtgcttagaa catgcctttc aggtctctgg cgatctccag 360
 gaccacgct aggtccttct ctcaaccacc ttcttgcaa cttgggcctt ctctgccttc 420
 gcggccgcaa ccttttgctg ctccacctcc taccga 456

<210> 1581
 <211> 457
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-038-Q1-E1-G5

<400> 1581
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 atggtaattt gatttggtta taaatttcaa atactaagag aagttggatg cttgatagtt 120
 gttttgagat ataaagggtg taatattaga ggtgtgctag ttgagtaatt gtgaaattga 180
 gaaatacttg tgttgaagtt tgcaagtcct gttgcatgca cgtatggtaa acgttatgtg 240
 aaaaatttga agcatgaggt gttctttgat tactttcctt atgagtgggtg gtcgtggacg 300
 agcgctacca atctaccccc cccccaagg agaatgcgcg tagtgcttgg ttttgatgac 360
 ttgtagattt ttgcaataag tatgtgagtt ctctatgaca aatgttgagt ccatggatta 420
 tacgcactct cacccttcca tcattgctag cgccttc 457

<210> 1582
 <211> 482
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-038-Q1-E1-H11

<400> 1582

acgcctgtcg gtaccggtac gaaattcccc ggtccacggg agctctgcaa cttcccgttc 60
 ttgcatggct gtgtcacact ttctgtcagc gggcgtgggt gctctgtctg gactacagtt 120
 ttctattgct tgttttcctt agcggttttc tatattttca gcgtatcatc cccatgtatg 180
 tagggtttgt ggatgcacac acctcatttg tatttctgtc acctagagga attgaataaa 240
 aggcttccgt ttggggaaaa aacaacgtgg ctgctcccg aaatggttgt attgaggag 300
 atgattggtg gccctgagcc tcgaagtga taaatgataa gttcatggtg ctaataacgg 360
 ggcaaagtct catccatgct agagtaatct tgattagtaa tagcaggagt ctacgtgggtg 420
 tttgatattg tntgagctag ctctacgtgt tgtagtagca ttggagttgc ctgtatgtgt 480
 cc 482

<210> 1583
 <211> 474
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-038-Q1-E1-H3
 <400> 1583

acgcctgtcg ngtagcgacc gaaattcgcg ggtccacggg gattggtaga ggtttgagaa 60
 gacctggtga ggctgctctg tctggttttg cttggttgca caccctacag cacttcacat 120
 agtgtttgac atgggttttc atcttaggcc aggcaaaca acaattaatt cgacgataag 180
 tgactgggaa cccggagtga ctgcccatag cactgtcgtg gaaggctgcc atgatttggt 240
 gcagaagaga agtcaaccg cccaacaaa tctggccacg gaaacacagg ataccttggt 300
 gtaaggaaaa ccgcccttg gggctctgtc ggatagctag tcgagtaagt aatttctgcg 360
 ctcgaggatt gctctttag ctgttcagtt catcttcaa ccaggctggc tgacaaacag 420
 atacaagggt caatgtctct gtcgctggac ctctcgaaag agcatctgcc gctg 474

<210> 1584
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-039-Q1-E1-F11

<400> 1584

gggccgtact taccgggtcc acggggcggt ctctatctcc tcctcgtttc ctctcgtaa 60
ttgtgatcga gagggcagcg atagagaaga aaggcgggga ggagaaacaa ggattgcca 120
agaggttctt tctgatcagt tcatcgccag gcatcatcat cgtcatcatc atcattatct 180
cttaatggcc gtgagtacct atctcactac gttacatct cctcttttgt gggtaccgat 240
gctttactac tgtctactca gtgcatgcat gcacgcatga tttcgacact gttatggccg 300
cttgatcatg tatttggttt gttttataa ttttggtca tgattgctgc gtctgcgtaa 360
tggtttctct atatattttt caagcactct gtaatacacg tatggccgta ttgaattgac 420
catgggttgg tgggtgtgga acgat 445

<210> 1585

<211> 139

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-039-Q1-E1-F2

<400> 1585

ggggtcacaa aacaaacaaa cccaaggaaa aaaaaaaaaa aaaaaaaaaa aaaaaagcgg 60
cgccccaaaa ggtcaagcct aagttaccct tgaaggcacg tcaaaactcc tccaaaatgt 120
caccaaattc attcacggg 139

<210> 1586

<211> 371

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-039-Q1-E1-F6

<400> 1586

ccggctggac ggggtgctga tgatgttgtt gttgctgttg ctattgctgt tgctgctgtt 60
gctattgctg ttgctgctgc tgctgttgc gttgttgcgt ttgttggtgt tggtgctgtt 120
gttgctgttg ctgttcttgc tggtgttgtt gtttgcgttg gctgttggtg ctgttggttg 180
tggtgttgtt gttgctgttg ttgttgctgg tggtgttgtt gctgttggtg ttgttggtgt 240
tggtgttgc gcagttgttg ttgttggtgt tggtgttgtt gtcggtgttg ttgttggtgt 300

<211> 423
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-040-Q1-E1-A8

<400> 1589

gtaccgagtc cagaattcnc gggctcgacgg gctccgccct cctttgcgcg tagaactcgc 60
gctcgttgat gatgtcctac gggaagtgtt ggcgccacaa cgccatggct tctcgtcca 120
tcttgcatg tcgagacggg gatctcgct ccggttgctg cgacgatcct cgtcggtgct 180
aagccacggc agaggcgca gctcctgcgc cactccgc gtcggcacgt tggggatgtt 240
caatgttcta tgaggccacc ggaggcgca cgccgccgcg tcgtacgcgc aggcagcctt 300
gttggagggtg ttgaaattgc cgaggctgag gcgcattcca cggaaccgga tctcggcgga 360
gaagccgccg gagggcgcg tgccgcgta tcnccaagtt tcccgatgac gcacggcat 420
ggt 423

<210> 1590
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-A9

<400> 1590

taccggtcca aaaattccgg gtccacgggc gcttgacag gataccaagc gagtggttag 60
gatccacac agggcatttc ttgacatgct ctagcacac cttgggctaa tcaccggctc 120
agtatgatcg tgttgtaaat gaggacggca agatctgtgt gaccatcttt ttcaacacct 180
gtacattgga tcttgaggga ccaatcagta tgaacgcgtc gtgtcatcat tctcctggt 240
ctacattatg ccagacatg caaagtgtg gatcgtctgt aagctaccat ttgctttcgt 300
atgtcctatg tctgtgatat ttgtactaa acctattgtg ctacgtgctt tctatgttcg 360
tacattgta ggtggctcct tattgtgtgc atacaacaa acct 404

<210> 1591
<211> 398
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-040-Q1-E1-B6

<400> 1591

gtacaagtcc agaattcncg ggtcgacggg aagggcatac atcgtgccgg cgcaggacag 60
ggccatgtga tgggcgcgatg caattgttgc ggtatgatta ctttggttca gatccccggcg 120
gggccaaatg tcggttgtac cgggtaccatt ggcttcaata ccggttggcgt tgaaaagcga 180
ccacatgatc tgtttgatat tcggcatctc acgtggtgac atgagtacat atcttgaata 240
gaaccaaacc aaacctatct tgttgacatg agtacatatg taagcctatg tggttcagta 300
gaggcagctg ctcatctgat aatgatcacc agctatgtgt aacctgttga caataagacg 360
gcactgctca aacagaccat canctaaagg ctggggct 398

<210> 1592
<211> 389
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-B7

<400> 1592

gggtcgacgg ggccacccaa gacccaacag agccgcacca ctccccacct cgacctctct 60
ctctccccgc gacccttctc cgccgcccgc acccagcccg gtgattcctg cagcttccgg 120
cgattccggc tgctgccgac gatgccaagc aactcgcac gatcgctcc gtccgctccg 180
tcttccttc cgagcagatt cgtcgctcgc gtcctctacc gggtaccgc gaccgtcccc 240
taagctaggg ttctggccac cgcgtcgccg gcgtggctcc ggcggctcag atcgagcacg 300
ccaatgtcgc cgtcgtttcg cttgcgctgg aacagcaaag ggaaggccat ggacgacgcc 360
gctccagccc ttctccgacg ccatcaagc 389

<210> 1593
<211> 374
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-B8

<400> 1593

taccagtcca gaattcgagg gtcgacgggg acctcctgaa ggtgatggac cggagcgacc 60
 tcaccggcgc gcgtgcagcg gcagatgctg ccccgcaatt cccctgaaa ggacctggct 120
 gggaggtcgt ggtggccgcc gggggcggtg tgctctcagc gtcaccagc tgagccccgg 180
 gtccgctcca gtgaccggcc tgtcaacggc gaccgacgcc ttggtattct ggtgcttcgg 240
 ctttgttcgt cgctgtgtt aaggccaatg ttttgtgaa catgatttgg ccatgacacc 300
 ggaatcttac cccccaaat taataatggc caaccaaggc tttccatttt ttctggctctg 360
 gaaccctaa atta 374

<210> 1594
 <211> 445
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-040-Q1-E1-C11
 <400> 1594

ggtccgagaa ttaccgggtc gacggggaag tccgccgcca aggagggcgg cgacaagaag 60
 ggcaagaaga aggccaagaa gagcgtggag acgtacaaga tctacatctt caaggtgctg 120
 aagcaggttc accccgacat cggcatctcc tccaaggcca tgtccatcat gaactccttc 180
 atcaacgaca ttttcgagaa gtcgcccggc gaggccgcca agctggcgcg gtacaacaag 240
 aagcccacca tcacgtcccg ggagatccag acctccgtcc gctcgtcct ccccgcgag 300
 ctgcgaagc acgcccgttc cgagggcacc aaggccgtca ccaagtacac ctctcgtag 360
 agtgctcctg ctctgtgtc tcgtanttag ctgtccgggt gtgtttgtgg ccgtgtaatc 420
 gtgtaagaat cgcaccgtga tgttt 445

<210> 1595
 <211> 306
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-040-Q1-E1-C12
 <400> 1595

gtttggccga ctacacccta tagtgagtcg tattaggaaa cgttgggcca catcaatgca 60
 aacgatttca cgttctgatg tagaagatct agatcctcaa cgtgctgatg tatgttcttt 120

gctagatcga catctcgtcc atcgatcatat caagcattaa gtcgttcattg atggatatca 180
 tcgagaacct caccagcggt gtcattggtgc ttttttcgta agcaccgaat ctagtatcag 240
 atcataggag attaaatctc cgtgcttggt catctttccc ggtaatttcc ccaactacgt 300
 attctc 306

<210> 1596
 <211> 450
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-040-Q1-E1-C2
 <400> 1596

gggtcgacgg gaaagcggcg gtgaacctga tgaagctcac ccttttccgc cagtactacg 60
 tggttgtcat ctgctacatt tacttcacgc gtgttggtgt gtatgcgttg gtgaccatca 120
 cctcgtaccg gtacctctgg actagcgtcg tggctggaga gattgccacc cttgcattct 180
 atgtgttcac tgggtacagg ttccggcctg aggtgcacaa cccatacttt gcgattgatg 240
 atgatgagga agaggctgca gctgaagcac tcaagttgga tgatgaattt gagctatgag 300
 tactataatt tggcggccta ttccctgcca gtgctacaca ggtgttatat gtgcttctac 360
 aggacaagtg cttttcacaa gacanatgcg atagactggt atctagtcca tacccttttg 420
 tttttcattt gaagttagtt aacattttgc 450

<210> 1597
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-040-Q1-E1-C6
 <400> 1597

gggtccacgg gcggagcaga agaaggagat ggccactatt gctgtcggct ggcagggtggg 60
 ccagcagacg acggtggcaa caaccatg gaggacgagg cggcgccacc ctccctcgccg 120
 gtgcatgcgg acctcccat cggcgagtc cgtgcgcact acacggacat gccacaggag 180
 gaggaggagg ccaagttcca gcaggcgtag gccgaccagg cctactacct ccgcctctc 240

gaggagcccc ggcgtgcgga ggagctgctc accgcccga catccatcat gcctgacgtg 300
gacgtgcccc agcaggagac gttgctcgag tectaccgct ccgcacgcga gattcgtcac 360
gaccgctggg ggtaccgcca acgtcaggcg gagttagaag ccgccta 407

<210> 1598
<211> 292
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-040-Q1-E1-C7
<400> 1598

tggtgggtggg ggtgggtggg gtggtgggtg tgatgggtgt ggtgggtgtg gtggcggtgt 60
tggaatttgt gttgttgggt ttgttgggtg ttgttgggtg gtgggtgttg ttgttgggtg 120
gttgttgggt ctgggtgtgt ttgttgggtg gttgttgggt ttgttgggtg ttgttgggtg 180
gctgttgggt ttgttgggtg ttgttgggtg gttgttgggt ttgttgggtg ttgttgggtg 240
gttgttgggt ttgttgggtg ttgttgggtg gttgttgggt ttgttgggtg ttgttgggtg 292

<210> 1599
<211> 412
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-040-Q1-E1-D1
<400> 1599

cggtccgaaa ttaacgggtc gacggggagt cggccaagct cggccgctac aacaagaagc 60
ccaccatcac ctccaggag atccagacct ccgtccgctt cgtcctcccc ggggagctcg 120
ccaagcacgc cgtctccgag ggcaccaagg ccgtcaccaa gttcacatcc tctagactg 180
acggcgtgca gttgggttct gcactctcat ctgtactctt gactctgctt atctatctat 240
ctgcaagtag tgggtgggtg agtagtacct gtgctgggtg attgccaacg ctttgggtggc 300
ccgttgggtg taagagctga agttgctgct ttggcaaact gaaatctatc tagaactgaa 360
gttgtgggtc taaaaaaaaa aannaannaa aaaaaaaaaa agcggccgct ct 412

<210> 1600
<211> 408

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-040-Q1-E1-D11

<400> 1600

gggtcgacgg gtggcggaag cgtatacaat acaagtgacc aatatccggg atcgcgacgg 60
 actgactggg actcctctag gcgtcggaca cgctatcaaa ctcttcatcc aagagatcgc 120
 cttcgtcaac atctggccaa atcaacaagc caggtgagta ctatgaaagt actcgcaagg 180
 cagttcggac ataagatata acaaatgcaa acatgaagca tatgaacaag ttaaccagtg 240
 cgatcagaca tagagataat aaatactgga tgccaagcga gggctctgaat gacgcctcga 300
 gcggaaactg cagaatagta atactgggtgc caaacgagtg tctgaaagac tctcgcgagcg 360
 gaaaatgcgg agtaataata caggtgtcaa acgagtgtct gaaagact 408

<210> 1601
 <211> 218
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-040-Q1-E1-D12

<400> 1601

cggtccgaaa ttcncgggtc cacgggtgac ggtggtgtcg ctcttgaatg gtggcagcgg 60
 catggcgcag ttgagcgtgc ggccaacgac agcaaacaga cgggaaaaga tgtctaagag 120
 gtagagttag gcgagcgaac ttgtctggtg gaaggaattt ggaggggggtg ctcacctacg 180
 gcgacggttg gcgaaaaaca gtagagatgg ggctgtat 218

<210> 1602
 <211> 432
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-040-Q1-E1-D6

<400> 1602

gggtcgacgg gattctttac agactgtact attttggcag attgatgtta tgtttgcatt 60
 gtttgcataat gtttgcttgt ttaatgattc tatttttagga taggagtatt aaatatgcag 120

aggcatttta gtatgcaatt ttgaataata attttagtga tttgttacag tagataatga 180
 taaggttatt gcgttgattt atactaactt atctcacgag ttcttggtga gttttgtgtg 240
 gatgaagttt ttaagatgta gggaagccgt aatataaaag gaattaagga gacacaaaag 300
 ctcaagcttg gggattccca aggcacccca agataatatt tcaataagtc tcaagcatcc 360
 aagcttgggg atgccccggt aggcacnca ctttcttct tcaacaatta tcggtcagta 420
 tcggttgagc ct 432

<210> 1603
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-040-Q1-E1-D8
 <400> 1603

gggtccacgg gcgagaagac gaagaatccc caggagatga tcacgacggt gatgctgtac 60
 acagtcatca tgtagaagat gcaggacatg atgatgagga agatgccgga gcagacgacg 120
 ggcatgatca tgaagatgat gatgccggcg gagcagacga cgctggacca tcgatgggct 180
 gggtgcagga ccctcatatt caagagctgc ttctcaagca gacggataac gcaagagctg 240
 ccgcccgaga gaatgccaa atggatcaac ttgagttaga cgcggttact ccattgtatg 300
 aaggatgcag gcctgaggat accgcctga aagtaacgct catggctctg gagatgaagg 360
 taaaacacaa aatgaccgac gtatgcttcg atgagaacat g 401

<210> 1604
 <211> 299
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-040-Q1-E1-E1
 <400> 1604

gggtcgacgg cagagtgact ataattaaat atttgaaata tatgatgcat gattacccaa 60
 atcaatacga actaaatata ataagaaagc acgatagcgg gagagccacc caacaagcac 120
 cgcgccacg ccgcccctctt ccggactccc ctctctccct cgccctgcgg ccaacatggc 180
 cagccacct tcgttcgacc tcccgtctct ccatgccctc cagccaccgc ggccaggaat 240

gacacgtcac cctcgtccag catccctct ctcctcgcc tccaccttcc tatgtcatt 299

<210> 1605
<211> 454
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-E6

<400> 1605

attcccgggt ccacttccac caaaaagatg gccaccatct catcgacaga tcggggcccct 60
cacctctgtc aagtggatc caatttccag gttgctcggg gagattttac agctttttgt 120
agtttagatc gactctgttc ttcataccta tagctcacia aaaagccaaa aaaattaggg 180
ttcgttcatc ctatccgaac caatctgagc ctttgcataa tcttttctgt atttgctttg 240
ttgaatttgc ggttgcatca tcgtgtcaag ttgctcgtct tagcgtctag tccttttagag 300
tttcgagttc tgttcatagg ttgtcatgtc gccgctgcca tatatcacia ccgcatcatc 360
atcatcgatg ctgccatata ccacctccgc accaacttca tcgccgctgc catataccac 420
caccacatat tagtcgcat cacaccaatc tgag 454

<210> 1606
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-F1

<400> 1606

ggtccaaaat taccgggtcg acgggtcgaa tacttatgga accccaaaaa ttctaaaata 60
aatttctgga cgtgaggaat ttacctatta atcatcttca aaaataatta actaaatata 120
actctccaat gaaaaatggc agcaaatctc atgagcgcta aagtttctgt ttttttacag 180
caagatcaca aagactttcc ccaagtcttc ccaaagggtc tacttggcac aaacactaat 240
taaaagcata aaaccacatc taaacagagg ctagatgaat tatttattgc taacctctat 300
tatcacgcaa ctttcaccgg taccataaac ccacatata ctttctcaa aacagccacc 360
atacctacct attatggcat ttccacagcc attccgagat atattgcat gcaactttcc 420
accattctgt tagtatgaca cg 442

<210> 1607
<211> 269
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-G7

<400> 1607

ttcgcggggtc cacgggaagg acgcaaacc gaagaaggcc gaaaagatgg gttctgagtt 60
gttcagtctg tgtgctgtgt agtggtcgtc tgaatgagcg cagttaacgt gttctgtcta 120
attgtcgatg taacctgtgt tgtgatggaa gaaatccaag ttagttgaa acttggtctt 180
atgcaatacc ggccgatcta aaggatccaa acttacgtac ccttgcatgt catctcatat 240
gtcatctaaa tcgtcatcca aattcaatt 269

<210> 1608
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-040-Q1-E1-H7

<400> 1608

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aggcgatcgg tgtcttcgag agcgtgcagc cgtcagacac cgacctcggc gccaaggcgc 120
ccaaggatgt caagatccag ggtgtgtggt acgcgcagct cgagtctaac tagagcagag 180
cagaagtga gatactcatc ttgtgtgcat gcgtacgtgg gttgatcggg ggagaggaaa 240
caatcgaggc acaaatgtg tttgtgtgtg tatctagtaa tctaaacca ggggtgtcgg 300
ttatatatta gttctgttta ttattgtttc ttcttgaca actcatgata ttgatcccc 360
atgaatgttc acaaatctt ttgttgataa aaaaataaaa aatgataatc aaaaaaagc 420
ggccgctcta gaggattcaa gc 442

<210> 1609
<211> 380
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-A10

<400> 1609

aggtaccagt caagaattcc cgggtcgacg ggagtgccaa ccaaggggtc aactccgggg 60
aagatgagaa gagggaaacct ggtcctcctg gagcagcagc ggccagtgtt aatggattcc 120
aagaaagcgg cgtggaggag cacaacctgc ctgacagccc ctttgcatct cccacataga 180
cgaatgatgc tgctgtgtgt tcttcctctg caaaaccagc ccacgtgtgt accatcattg 240
gcaacaatag cagccctcat ctgggtggcct cgtctctgtt ccttcctatg ccaactgccc 300
ttgagctgcc cccatacaaa tctgtcttct tccaagtgcc caggttctct cctggccatg 360
gatccatcgg gctgtaaata 380

<210> 1610

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-A11

<400> 1610

aggtaccagt ctagaattcc cgggtcgacg ggcactgtca tatttcttcg catgatcatg 60
tagttgacat cgtattttgtg gcaaagccac cgatcataat tctttcatac atgtcactct 120
tgattcattg cacatcccgg tacaccgccg gaggcattca tatagagtca tattttgttc 180
taagtattga tttgtaattc ttgagttgta agtaaaaaag aagtgtgatg atcatcatta 240
ttagagcatt gtcccagtga ggaaaggatg atggagacta tgattcccca caagtcggga 300
tgagactccg gacgaaaaat aaaaaaaaag aggccaaaag aaaaaaggcc caaaaaaaa 360
aaaattaaaa aaaaaaaaaa aagcggccgc tctaaaggat tcaagct 407

<210> 1611

<211> 401

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-A2

<400> 1611

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caccttatgt ggaaaaggct gaacagaaga agaaggacta tgagaagacc aaagccacct 120

ttgataacaa ggagagtgcg agctccaaga aggccaagac tcagaacgat gaggaggtca 180
aatctgaggt cgaagatgag ggtagcgatg aggaaaacga ggacgatgat gagtaaatag 240
tgtatcagag tatgaggtat caaattgggt gttgggtccc cgcttagtgt actagtttgc 300
tattctgcta tcttcagtgt tagatgatga gatttggaag tacatgttgt gtttgttgt 360
taagggggcc cttttaaacg tgtggactca tggtttgaga a 401

<210> 1612
<211> 406
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-A5

<400> 1612

attccccgggt cgacgggggcc ctgcacctct ccatcgagag gtcaggag atccaggacg 60
agctcgagaa ggtaaatgaa gaagcaagtg ataaggtttt ggaggttgag cagaagtaca 120
gtgagattcg cagacctgtc tatcttcgga ggtgtgacat catcaaaaca attccagact 180
tttggtgac agcgtttcta agtcacctc ttctcagtga gcttttgact gaagaggatc 240
aaaagatgtt caagtacttg gaatctgttg atgttgatga ctctaaagat gtcaagtcag 300
gctactccat cactcttaac ttctctgaga atccgtactt tgaagacaga aagcttacca 360
agccatatgc ctttgctgat gatggaacaa ccacaataaa tgccac 406

<210> 1613
<211> 459
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-A7

<400> 1613

attccccgggt cgacatcacc tcgacagacg acgctgaat tcacagacca tggccatcgc 60
ccataataat ttgtatgtat ataagagaaa tctgtcataa acaaaaggga tttcaccttt 120
acacagttaa taaaaagaa tgacctaaaa tcaaatgcct ctagattaaa caaaaatcga 180
gaacagaatt gttcacccat cagcatgaaa ggaatggtgt gctttataca gaaaggaatg 240
atgtgcttta taaaagtgag cacactacat ggatgcaatg gtcgtgtggt gataatctgc 300

atcgagattg gtcattcata ttcatctat gatctgtaa tagtcgaaa agaaattcca 360
 cttcaagatg aaaaacacaa tagcatgggt attgaattgc aagatgggcc ttgtttcaaa 420
 actaaatcac atcccaatgg tggtaatggg ttcccttta 459

<210> 1614
 <211> 381
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-B11
 <400> 1614

aggtaccgag tctagaattc cggggccgac ggggatgaat gaatccattg tgagaagagc 60
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 ccgcaaggct tgagctgaac tgaaccgatg gagctaccat ggaaccctct ggccatctga 180
 tgtgtgtgta taagtagtgc tgacactgca gcccgtttcc tgaggaaatt tgttgggtcg 240
 ttgaaattga gttgtagtgt tactactttg agctgtagct gtagccctaa atcatattgt 300
 gtcgaactga agatgtaccc cagtaagttc attcatgaat gcaacatttt ggcgttctgc 360
 agctgagcag agtcaatgcc t 381

<210> 1615
 <211> 404
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-B12
 <400> 1615

aggtaccgat caggaattcc cgggtcgacg gggacgccac cagtcgatcc cttccttctg 60
 ccggtgcgcg tcgagatccg ttaacaggcg cccccctccg gctccggcga cagagagggg 120
 ggccaccgac ggcgggccggc gaccgaagat gttccttgtg gactgggttct acgggggtgct 180
 cgcgtcgctc ggactgtggc agaaggaggc caagatcctc ttcctcggcc tcgacaacgc 240
 cggaagacc acgctcctcc acatgctcaa ggacgagagg ttggttcagc atcagcctac 300
 acagtatcca acttctgaag agctgagcat cggaagatc aagttcaagg catttgattt 360
 aggaggccat cagattgccc gccgtgtgtg gaaggattac tatg 404

<210> 1616
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-B2

<400> 1616

gggccgaaat tcccgggtcg actatgtggc cggtcagtag ggtgcaatat ggtgctctat 60
 gatgagctag tgatcgtata atcgccgcag aactatttct agtgacctta aagagcgat 120
 tgttacatac ttgaccttc tgtgtatttt tctcatttca aattaagcca tattaatcag 180
 aaaggacgca gtatggacta ctactactag tactagtact gctttgatgt gtcccgtaa 240
 ctgcgcgaac gaggagaagc ttgcttacta cgcctctccc tcgcccacgc acgcggtggt 300
 tcgcaggacg aggagagggg tttgactaca gcacctctc cctctccctc accctcgccc 360
 tcgcccctgc ggtggacgtg caacagttca atcggtgtca gattgccaga agcatattgt 420
 actgtaatat catcattgtt ggaccttcg 450

<210> 1617
 <211> 360
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-B5

<400> 1617

tacggaccga gaattcccgg gtcgacggga ggctcaaagc ttaggctgag acagatctta 60
 tcccatactg ttaccagctt tttttcttgc tttgtggcag attgtttggg tatccgttta 120
 tgcattgcaa ttgcaactct gagctgctgc gaatgttcca actgatgagg tttatgcatt 180
 ttgaacttta tagtaatgct atttgcagtc cttcatgaat aaagaactca caaaacaaaa 240
 atacaatcaa aaaaataaaa acctgactaa tattaacaaa cggacgccct agaggatcca 300
 atcttacgta cacgtgcatg cgatctcata acccttctaa atcgtcacca aaattcaatt 360

<210> 1618
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-B7

<400> 1618

gtaccggacc taaattcccg ggtcgacatt cgcccgaag aaagcaacga gcgcgctttc 60
ctatttgggg tcaagagtgg cgctgatggg gaaggtacca ccagcgctat cctccttgat 120
ggacaccttc ttggtctcag gtggagctgc cattgccttc tttcgcttgc cggaggagct 180
cgacggtgcg tcctcgacgg tagcgagca ctccgaagag gtgcgcttgc cggagtgggc 240
atcagagctc ttgtcggact tggctcttct cttccccccg ggagcttcag cggcaagtat 300
cttgcgttct gctgcggctg ctgcttcccg gtagatcttg tcggcacaga taagagcatc 360
cttcttgctg ccagggacag agatgacact tattgggcct ggcattttca gtacgttgta 420
cacatagtga gaggtgcc 439

<210> 1619

<211> 423

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-041-Q1-E1-C1

<400> 1619

cggtccgaaa tacncgggtc gacttcttct cccccggctg cggtggctgc gcgcgtctcc 60
acccaagat tgcgcagttc gctgagcgga atccggacgt gctgttcctg caagtcaact 120
acgagaagca caagtccatg tgctacagcc tccatgtcca tgcctccct ttcttcaggt 180
tctacagggg agcccagggc agggtcagca gcttcagctg cacaaatgca accatcaaga 240
agttcaagga cgccctcgca aagcactcgc cggacaggtg cagcctcggc ccggcgcggg 300
ggctcgagga ggcggagctc ttggctctgg cggcaaacag ggacctggaa ttcacctaca 360
acgagaagcc gacgctgggt gccgatcgcc gaggctatcc agatggaagc tgcctccatt 420
ggc 423

<210> 1620

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-C10

<400> 1620

attcgcggtt cgacgggttt cctcatcttc ttgcctcct ctcctctttt ttcttctgca 60
 tcttctcttt cttctttttt cttctcgtcc tcctcctcat cttcgtccgt tcgtttttcc 120
 tcctcttcgg ctactcatct cctgggttacg tcttctacgt ctttccgaaa attgaagtaa 180
 acggaaatgt aaagctaaaa ctaaaactat ggctaaaact aaaacgaaat cgaaggtaaa 240
 catagaccga aactaaaaaa tacagattgt aaggaaaaaa cgaaatctaa agctaaaact 300
 aaagtaaaac taaagctaaa tgtaaaacta aacctaaaac taaaattaaa aggaaatcga 360
 aactagacat 370

<210> 1621

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-C3

<400> 1621

gggtcgacgg ggggtctgcaa gaggggtttg aggagtacgc ggagaaggcc aagacgctgc 60
 ccgacaccac caccaacgag agcatgctct gcctctacag cctctacaag caggccaccg 120
 tcgggcccgt caacacagcc cgccccggaa tgttcgacct taagggaag gccaaagtggg 180
 acgcctggaa gtccgtcgaa gcgaaatcca aggaggaggc gatggcggac tacatcacca 240
 aggtgaagca gctgctcgag gaggtgccc cgcctccgc ttcttcttag gccacagaac 300
 ctacttttat ccatggtggt gcagacatat gtgccaataa acacaaataa atttgaagtg 360
 ctatctgtct aagcttatcg tcgtattggg tgtaattacg ttgaacaagc cccgcctgtg 420
 atatttgaat ttacgccaat gatgaatc 448

<210> 1622

<211> 462

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-C4

<400> 1622

cggtccgtaa aatccgggtc gacgggagag cttaaatagt agagttggga aatccaaaac 60
 agtggatgct cctgaaaagc cacgaatgag ctacagatgac gttgacaagt ttaggaggag 120
 aagatgcttg gtttggatgat ctatgatatg acgtctgcac agttcatgga gtagtttccg 180
 aacaccatgg aatgggattc aagcaactgt gtcatagtgt atagcgagga acgacgctga 240
 cagttcccg cagtagaggga taatagctgt gttaaagtgt ggagaagaag aatcatgacg 300
 ctggtgaata agctgttatt tatcaaaaga gggtagctct caacatggta actttctcgg 360
 ttaattaacc tgtatcgcaa cccccagtgg cggtaggatt tccatcatgt aaaagtgttg 420
 tctgtaatca ccagggacaa cgatagaaca ttgctgcca cc 462

<210> 1623
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-C5
 <400> 1623

gtaccggacc taaattcccg ggtcgacggg gttgaatgaa tccattgtga gaagagccct 60
 tgtgatcatg caccagaggg acgaagtgga gtacaagagg gagcgccatg tgattgtccg 120
 caaggcttga gctgaaccaa aatgatggaa ctaccatgga aaccctctgg ccctctgatg 180
 tgtgtgtata agtagtgctg aactgcagc ctgtttcctg aggaaatttg ttgcgtcggt 240
 gaaattgagt ttagttgta ctactttaag ctgtagctgt agccctaaat tatcttgtgt 300
 cgaactgaag atgtaccaca gtaagttcat tcgtgattgc aacatttggg cgttctgcag 360
 ctgagcagag ttaatgccta tgaaaccgaa aaaaaaaac gggagaaaga aaaaaaagc 420
 ggccgctct 429

<210> 1624
 <211> 397
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-C9
 <400> 1624

aggtaccgag tctagaattc ccgggccgac gggggcgac gagggtttct gcgctcgaac 60

aacccgggac ccggcggcga ggaagagaga gcggcggaga tggcgggtgat ggacacggcg 120
 ttcaaggcgc tgacggcggg gctgggctg gcgacgtct acctggcccg ctccttctcc 180
 ttcaacgtct accgcggcct cgctggcac tccgagcaat ccaagctaga aaaagaaaat 240
 gagaagagcc aagattgaga gggaaggacg gcaagttagt gtcggacatt accaatcaaa 300
 aggatctgca agaaatctca tcttttgatg atgagtggtc attcgtgggt gattttcgga 360
 cagttccttt gatgtaatat agattcaggg atttga 397

<210> 1625
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-D12

<400> 1625
 ggtaccgagt caggaattcc cgggtcgacg ggtttggagc tctagtcttc tcaggcttca 60
 tcgtctacga caccgagaac ttgataaagc gccacactta tgacgagtag atctgggctg 120
 ctgttgagct ttacctcgac attctcaacc tgttcctgac catctacag atgctcaggc 180
 agaatgacaa ctgatgggtc ctgtctgaac caccaggaac cctgtgcca cccaggcata 240
 tgtcctacat ttatcaagtc ttttgaattg ctatctacat aactcggaag acatggtagt 300
 gaggttttgc catcatccag agatgaggcc aaagtacaac catatgtata ggcgttctat 360
 tgtgagttta tgtgcctgag tgttgagtgt tgtaaactg ccaacaatca gtgatcgat 420
 gaaccgtttt aatgcc 436

<210> 1626
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-D2

<400> 1626
 ggtccgaaat acccgggtcg acggggctgg agttaatttt ggctttcccg cgaggtagata 60
 agttttgtta tgtcctaagg ctaatgtttc cctgcactaa caatgcagct aaatatgcgg 120
 cttgattcca tggcctcagg atggctaaag agatgaacct aagctgggtc aggtgttttg 180

gcgattaaga tctagtggcc cagcaattct caggaacttg ggattccaag gacccgctca 240
 ttgtggctta tcgctgggcg gttgatgata ttgttgggca tttcaagggt tatcagggtg 300
 aacatattgg tcgcaggaaa aaaatgacgc ggctgatgct ttaagccggt tgggggtctca 360
 gcgtaagcca atgccaccta atgtctttct tgatgttctg agtaatcctt cagtttaatt 420
 gcctacacaa gaggatcttg ctatccctga cc 452

<210> 1627
 <211> 471
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-D5
 <400> 1627

taccggacca gaattcccgg gtcgaâcggga agccaaaggt atctgtaccg aacggtgtca 60
 atggagagaa acagcaggat gccgtcaatg ggaagccaaa gtcgcctgtg gcgaatggtg 120
 ttaacgggga tgcgaaggtt ccggcagaga aagccgctgc caccgctgct cctccggccg 180
 ttacctacgc ggcgaaggtg gcccaaacag cagcggccga gaagaagcct gtggcgaccg 240
 agaagaagcc tggtgtcgcc aacggtgctg tcaagaccgg agtagctgct tgatcgcat 300
 acccgatcct ccagctagc catgaagaac aaacggacgg tgctggcgaa ccaggcgaga 360
 catgcggggt ccaaggtact gatcatcaaa ggtggcgctt ggaaagcggg tcggatagtt 420
 aggtttccct agctctctcc tttttcttct tctgtcgtcg tcgtactatc a 471

<210> 1628
 <211> 401
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-D8
 <400> 1628

ttcccggtc gacggggggc taacaggcga tgaaggggag caagagtgat cttccagctg 60
 ttgatcgagc cgtctctcca gtcactaacc tctcccaagg cttccccca gccctgctg 120
 atatattgac aacatttttc accaatggaa atggagtctc atcatagagc aatagctgta 180
 tacatacatg tttatagcct gtatctaag tcccagcagc cagccatcac ccccccatga 240

gcctaggagc cttctttttc tttcttatta atctagagat cccttttttg tttaacctaa 300
tcggacatga agcttctca agcttgtttt tcatgggctc ttgctaagggt ttgggtcaagt 360
tgtcagctcc aacatgtggt agctatgaac ttatgatgat g 401

<210> 1629
<211> 435
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-D9

<400> 1629

ggtagcgggc aggaattccc ggggtcgacgg gatcttcagc cccatcaacg aatcagtaac 60
cgcttacttc cctcatcag caatatagtg cctgcaaagt ttcgaccaac tgggtccatct 120
gttgtaggc aggatttttt gctcggttga agctagcagt ttaccacttc aaatttagag 180
tcttgaatct caaggcatgt gagaactgag ttgggttctc catttagtac agttgaaaat 240
gtttgttttg gctgtgtggc aatgccgtag cgtgtttgat aattagggtgc aacttttaag 300
atgactgaat gccttgctg attgtttttt tacctctgtt gttatcattg ctctaaattt 360
taggtctgct cacgctgcat atcttataag tttgtattg tctgtagtat ttctcaatca 420
agatgttcga aggaa 435

<210> 1630
<211> 393
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-E10

<400> 1630

aggtaccgag tcaggaattc ccgggtcgac caggctgaga aaatgggact tgactacatg 60
gatgttgaaa gtctcaagaa gatgaacaag aacaagaagc ttgttaagaa gctagccaag 120
aagtaccatg ctttcttggc atcagaggcc ataatacagc agatccctcg tctccttggc 180
cctggtctta acaaggcagg caagtttccc actctgggta gtcaccagga atctcttgaa 240
gccaaaggta acgagacaaa agctacagtc aagtccagc taaagaagggt tctttgcatg 300
gggtgtgctg tgggcaactt gtcgatggac gagaagcaga tccaacaaaa catccaaatg 360

agtgtcaact tccttgtgtc cctcctgaag aag

393

<210> 1631
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-E11

<400> 1631

aggtagcgag tcaggaattc ccgggtcgac gggatatact catgcatata tggctggtgg 60
aaagctctat gattacaatt tttgcatcaa gccaatcttc cctactgcaa aggaataaat 120
ttttatttaa ctatcatggg agttgttaaa cattgagaag atagacatcc tctcaatcct 180
aattaaacat catcattaaa tcccaacaaa attaattaga gtaacatgat gagattcaca 240
tgtaatcca attatccaag tactagatac tcaagacgtc cataactggg gacacggcta 300
accatgatta gtttatacac tctgcagagg tttgcgcact tttaccata agactcgatc 360
tcctccattg tattttctcg cactacatga tgtttgagaa a 401

<210> 1632
<211> 432
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-E12

<400> 1632

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aaaagactgg gaagcgacca actagagagc gacaacagcc atgtacatgc attaaaatta 120
ataaacattg gatgcaagca tgagtaggat ataattcacc atgaacataa atatcgtgaa 180
ggctatgttg attttgtttc aactacatgc gtgaacatgt gccagtcaa gtcattcaaa 240
agaggatacc acccatcat accacatcat aaccatctta atagcatgtt ggcacacaag 300
gtaaatcatt ataactcata gctaatcaag catggcaca gcaactctga tctctaattg 360
tcattgcaa catgtttatt cataataagc taataaagaa cgcgggactc atcatattta 420
caaaaacaaa ag 432

<210> 1633

<211> 110
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-E2

<400> 1633

tcaaaagaag gcggtcgctc cagacgatcc aagcatagct acgctgaca tgcgacgtca 60
gagctcttcg aaagtgtcac ctaagttcaa atcactgggc gtcggtttac 110

<210> 1634
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-E3

<400> 1634

gggtcgacct ccaccaaagc gatatccatc atctcatcga aagatcgga ccctcgctc 60
tatcaagtgg tatcagattt ccaggttgct cggtgagatt ttacagtttt tcgtagttta 120
gatcgagtct gttcttcata cctagagtcc acgaaaaagc caaaaaaaaaa tttagggtta 180
gttcatccca tccgaaccaa tctgagcctt gcataatcgt ttctgtattt gctttgttga 240
atttgcggtt gcatcgctgt gttcagttgc tggtcatac gtctattctt ttacagtttc 300
gagttctggt cacaagttgt cagccgctg ccgcatcgc atcatcgcgt ctaacagcta 360
ccaacaacgt tcagaatccg taaccatata 390

<210> 1635
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-E4

<400> 1635

cggtccgaaa atcccgggtc gacgggcata ggaagagagt tagacttcgt tgttgcagtc 60
tatatgttac tttgtgtca ccactaaatc acaaatcatt gttaattaaa attggctttg 120
atataccttg ggatccgggt ggatctatta cttgagcact atatgcctag cttaatggcg 180
ttaaagaaag cgctgccagg gagacaacc ggaagtttta gagagtcatt tatttctggt 240

gagtgccttc atatagttta aaaacaaaat aaaataaaga ggggaacca aaacttttca 300
 aaaaggaaag tgaaagtga agagacaatc attgttgaag tgggggagct ccttgaactt 360
 tgttcacgct cacggaaact ttgtgaatct tgattacaga aatttttcaa caaaaataat 420
 tatccccttg tacaattaca ttgtactaga caaataatgt gccca 464

<210> 1636
 <211> 454
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-E7
 <400> 1636

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 cggggaagtc cgccgccaag gagggcgggc acaacaacgg caagaagaag gccagaaga 120
 gcgaggagac gtacaagatc tacatcttca aggtgctgaa gcaggttcac cccgacatcg 180
 gcatctctc caaggccatg tccatcatga actccttcat caacgacatc gtcgagaagc 240
 tcgcccgcga ggccgccaag ctggcgcggt acaacaagaa gccaccatc acgtcccggg 300
 agatccagac ctccgtccgc ctgctcatcc ccggcgagct cgccaagcac gccgtctccg 360
 aaggcaccaa ggccgtcacc aagttcacct cctcgtacag tgctcctgct cctgtgtctc 420
 gtagttacct gtccgggtgt gtctgtggcc gtgt 454

<210> 1637
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-F10
 <400> 1637

aggtaccagt caggaattcc cgggtcgacg ggcccgttca cgtccatctt cctcatcgtc 60
 tactgcttcc tgccggcgct gtcgctcttc tcggggcagt tcatcgtaa ggagctggac 120
 gtgaccttcc tcacctacct gctggatgac accctgacgc tgtgcatgct ggcgggtgctg 180
 gagatcaagt ggtcgggcat caacctggag gagtgggtga ggaacgagca gttctggctc 240
 atcgccggca ccagcgcgca cctggccgcc gtgctgcagg ggctcctcaa ggtgatcgcc 300

ggcatcgaga tctccttcac gctcacctcc aagtcgggcg ccgacgacga gaacgacgag 360
 ttccgacgacc tctacatcgt caagtggacg tcgctcatga tcccgcccat cgtcatcat 419

<210> 1638
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-F11
 <400> 1638

caggtaccga tctggaattc ccgggtcgac gggggtgagg acggtgacga gggcgatgag 60
 tactagagcc tgccctctgg tgctttccca aggcattgctg ctgcaatcct atgatctgcc 120
 cgagtggctt tatctgttat ctgtctgttt gaacatttgc tttgtggtgt ttgttttaca 180
 acctgttggtg ttgtaagaac cttgtatggt tgaacctgtt atgcaccttg gttaatatgc 240
 atgctatctg gttatctaca ccatagcctc taaaaaaaaa aaaacaaaaa aaaaataaaa 300
 aaaaaaaaaa taaaaaaaaa aaaaaaaaaa aaaatcaaaa aaaaaggaaa aaaaaaaaaa 360
 aatacaaaaa aaaaaaagcg gccgcctaa ag 392

<210> 1639
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-F12
 <400> 1639

ggtaccagtc tagaattccc gggccgacgg gtatggtaga cattggagca tgtgcttgta 60
 gttcaaattt gaattatgca cattaatgc ccagaaactc aattaatgta taaaaaaggc 120
 gaaacgaacg cggaataatt ccaaaattta gcacgatact tctatttggt ctaatctgcc 180
 tgtgcaaaaa aacttaaggc gggagaaggc agtgtacgta tgtcgtttcg cacatggagg 240
 tgacacgtcc cctctcgga cagtagcct tcttgaggga agctccggtt tgcaagaagc 300
 ttacacaaa gcctgtccca attcagccaa aaaattcacc acaacatggt ggtgccatgt 360
 catgagacca tgccaagttt catgattttc aagcgtgttt tggattta 408

<210> 1640

<211> 403
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-041-Q1-E1-F5

<400> 1640

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caaggagatc gcgaggatcg acgccgccgg cgtccagcgc cacgcggcga gcatcaagca 120
aatcaccgat ctccgcacca aggtcatcgg ctacacggag gctgtggcga cgaagaaata 180
cgagaagacg gtcgaggtta ngcagacgtc cctcaaggtc cctttgctgg tgctcgccgc 240
cgctgggtcat cgggtcaact tcaactgtcct tgatccacta ccccggaagg accgccgtga 300
ccgacaaggc caagaacctg gtgaataaga agaccgctga gatcaagatg tccttgaggg 360
acaacctgat gaagatcctg acagaggacg accaggtggg cat 403

<210> 1641
<211> 464
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-F6

<400> 1641

ctgcagtacc ggaccagaat tcccgggtcg acgggcaaca atgaccaaga ttattaagga 60
gatgctaccg cctgatgttc gagtagcaag agatacaca gatcttcttg ttgaatgctg 120
tgtagagttc atcaatcttc tttcttcgga atccaatgac gtgtgcagcc gggacgacaa 180
gaagactatt gttcctgaac atgttattag ggctctgcag gatcttggct tcaaggagta 240
cgttgaagaa gtttatgcag cctacgaaca gcacaagctt gaaactctgg actctccaaa 300
agcaaccaag ttcactggta tagagatgac tgaagaagaa gctgttgccg aacagcagag 360
aatgtttgct gaagcccag caaggatgaa caatggagct gccaaaccaa aggagcctgc 420
attagaacca cagaatcaac cccaacagcc ccacaacct caac 464

<210> 1642
<211> 392
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-F9

<400> 1642

ggtaccgagt ctagaattcc cgggtcgacg ggggcagcac ctgctggaaa ggcggcccag 60
actgcggcgg cggccaagtt gccgacaaaa tctgctcccc cggcgcaggc tgggagggat 120
gcgaggagcg gaggcccacc atcacgtgga ggatttggcc gtggtgaacc tggccgcggc 180
agaggtggcg gccgatacgg ccagaaccgt gactttggca gtgagaacac gaatggctac 240
cagggagggt atggtggggg aggttctgga gatggcgctg taactggagg cggggatggg 300
gagagaggcc ctcgaccata ccgtggaggc ggtggtagac gtggtgggta ccgcaacggc 360
gagtttggtg atgactctga gagaccacct cg 392

<210> 1643

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-G1

<400> 1643

cggtccgaaa tatccgggtc gactgggccc cgaccagta cctgccgcca gtgccggatt 60
ccaccattg gcggatgcac ttcgacagct caaagatgcg caccagtttg ggagccggca 120
ttgtcctcgc ctctctcaaa ggcgacaagc tcaagcacac gccgcaaatt cactttgccg 180
cctccaacaa cgtggccgag tacgaagcgc tcatacacgg actctggctg gccaaaggaga 240
ttggcatccg ccggattcta tgctatggcg actcggactt ggtgctccat cagtcgtcag 300
gcgactaggt cgccaaggat gcaaacaatg cgagctaccg cttcctcgtc tagcagatca 360
gtggacactt caacgggtgc gagttcctcc atgtgccatg ggccgacaac gagcaagctg 420
atgccct 427

<210> 1644

<211> 389

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-G10

<400> 1644

gtaccagtct agaattcccc ggccgacggg gaagacaccc gcgggcaaga agcccaaggc 60
 cgagaagcgg ctgccggcgg gcaagacggc gtccaaggag gccggcggcg agggcaagac 120
 ccggggccgc aagaaggcca gcaaggcgaa gaaggcgctg gagacgtaca agatctacat 180
 ctteaagggtg ctgaagcagg tgcaccctga catcggcac tctccaagg ccatgtccat 240
 catgaactcc ttcataacg acatcttcga gaagctcgcc ggggagtccg ccaagctggc 300
 ccgctacaac aagaagccca ccatcacctc ccgggagatc cagacctccg tccgcctcgt 360
 cctccccggg gagctcgcca agcacgccg 389

<210> 1645
 <211> 394
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-G11
 <400> 1645

taccgatcta gaattccccg gccgacgggg aagtcaaccg ccaaggaggg cggcgacaag 60
 aagggaaga agaaggccaa gaaggcgctg gagacgtaca agatctacat cttcaagggtg 120
 ctcaagcagg tgcaccggga cgtcggcac tctccaagg ccatgtccat catgaactcc 180
 ttcataacg acatcttcga gaagctcgcc ggcgagtccg ccaagctggc gcgatacaac 240
 aagaagccca ccatcacgtc ccgggagatc cagacctccg tccgcctcgt cctccccggc 300
 gagctcgcca agcacgccg ctccgagggc accaaggccg tcaccaagtt cacatcatca 360
 taggtttcgt cgtctgtttc atggattgat ggcg 394

<210> 1646
 <211> 362
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-G12
 <400> 1646

cagggtaccag tcaggaattc ccgggtcgac gggagggcag gaggaagaag aaggcgagat 60
 cggctgtgca attatttggc ggcttgtctt tagtttcctt tgcgattctt tcccttgttt 120
 aagtttacc tgtggtgtgt gtgtgtcctt gcgagactat ttcggctctc tgtctgggtct 180

ctgcgacttg gtagcttctc atgggctcca tgggtgttga tgatgtggag ggaggagggt 240
tcgtgttagc taagttagtc cactccctct gttegtgttt tgtaagttaa ttagtagtat 300
gtgtgctact agtatatgga actttaaatc ggttcaaaaa aaaattaaaa acaacgtaaa 360
at 362

<210> 1647
<211> 438
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-041-Q1-E1-G4
<400> 1647

gggccgaaat acccgggtcg acgggcctta tctttctttc ataaaaagga atgaatggct 60
cggctagatg gaataaccga gccagaacag aaaaaaagta gaacagggtat aaataagaaa 120
atcttagtta agagggttca tgtaaagaac aggttccaaa tcacgatcga ttcccttttc 180
aaaacctgct gcagcagctc gggctcttcc tgcatgccat aaatggccca caaaaaagaa 240
gaatcctaga acaaaatgag aagttgataa ccaacttcta ggagagacat aattaactgc 300
attgatctcg gtagctacgc caccacgga atttaaagag cctaaaggag cgtgggtcat 360
atattctgct gagcgctggt cttgccaagg ttgtatgtct tttttcaacc tactcaagtc 420
caaaccgttg gggccctt 438

<210> 1648
<211> 433
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-041-Q1-E1-G8
<400> 1648

taccggacca gaattcccg gtcgacggg acgacgacgt ggatgtggac gagtcggata 60
gaaagctctt agatgatgaa aagagacccg atatcacgaa acgaccacac actcctattg 120
gagatgaggt ggaatgcaag aagccaaaga tagcagaagg ctcaagggtgc caaggagaag 180
aacctgaggc tggagggata aagaattcct cctgggtctg atgacagggg aatgcagtaa 240

acaccagaag catcaaaact atgatctgga acagtatcct gaataaacta ttttctggat 300
 tatgaatgaa ttctgaagca tggggctata agtgaattat gtaacatgga tttgtaacta 360
 tgggtggatgt taagttaacg ttctatcagt acaaaanaaa aaaaaaaaaa aaaaaaaaaa 420
 aagcggccgc tct 433

<210> 1649
 <211> 393
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-G9
 <400> 1649

aggtaccagt caggaattcc cgggtcgacg gggtttgatt ccttgcaata gttttgcat 60
 ataaagatgg tgatattaga gtcattgtag tcgttaattg tggattagta gaaatacttg 120
 cattgagggt tgtgattccc gtagcatgca cgtatggtga accgttatgt gacgaagtcg 180
 aagcatgatt tatttattga ttgtcttcct tatgagtggc ggtcggggac gagcaatggg 240
 cttttcctac caatctatcc ccctaggggc acgtgtagta gtactttgct tcgtgggcta 300
 ataaactttt gcaataagta tatgagttct ttacgactac tgtgagtcca tggattatac 360
 gcagtctcac ccttccatca ttgctagcct cct . 393

<210> 1650
 <211> 334
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-041-Q1-E1-H1
 <400> 1650

gggtcgacgg gttttatgta catcgctaga caacttacgc aggacttcat agttttgtag 60
 gatttttaaa gttccagagc tagtcgaaag ttacaaattg ctacaaagtg ttctttattt 120
 gacagattca gatctttcgt gtgttgattg ctgagtttca cgaatctatg agcactacca 180
 gggggatatca accatagaca cttcatcta tatcatgttc aacaccatca tcgataaatc 240
 atgcattcag tacagtacct tatgtggtgg attatcattc ctgcactaat ggagcttacg 300
 atatttcccg tctacttctg tgatctcaa tttt 334

<210> 1651
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-H10

<400> 1651

gtaccagtca tgaattcccg ggccgactgg cagaggaaga caatcgaaag gggacataat 60
gatcagatgc agttcgactc tagatataac gtacaaggtc taacagggtg gagtcaaaaa 120
tgaagatacc aacaacttgg ttatcgagct gctcaggcgc ctcaattctc gggacggtta 180
ctaaatatac agatctgttg agatatgtgg gatatttgtt gaattaatga cacgtgacat 240
cattgtgggt tactacaaat cgagaagatg atgccatggc gggttatgag tgctcacaca 300
aataaagaag ggaagatatt ttctaaatgt tgaagattga catgaaccag ttcaaatcaa 360
catgggtcct aatggttgag atataact 388

<210> 1652
<211> 326
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-H12

<400> 1652

gacggggata gtaagccact ttcatgccta taacgctgac caaagccatg gacacaagat 60
ccaacatgac gatcagtaaa gcttgactat gtacgaccgc atgcttctgt aggacatgca 120
tgatcgatcc gtgcccgcga caagttgatt ctcatctctc atctctcaac ttgatgcttc 180
actagtattg attactcagt acttatctgg aaatcctagc attgacgata tatcaagcag 240
gttgctcatc tagagcaaac tgggcattac ttaaccgtaa aggataatca ggttggtccat 300
cttcacccct cgaattgcat gggcca 326

<210> 1653
<211> 373
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-H6

<400> 1653

attccccgggt cgacgggggag aagaagaaat ccagcgagaa catcaagggtc atctacgccc 60

gcgccaagca gtacgccgag gagtacgatg cccaggacaa ggagttgggt cagcttaagc 120

gtgaggcccg gatgaagggt ggggttttatg tcagtcctga ggccaagctg ctgtttgttg 180

tcagaatcag aggtatcaat gccatgcacc caaagaccaa gaagatcttg cagctgttgc 240

gtttgaggca gatattcaat ggagtgttcc tgaagggttaa caaggccacc atcaacatgc 300

tccgcaaggt cgagccatat gttgcatatg ggtacccgaa cctgaagagt gtgaggggagt 360

tgatctacaa gag 373

<210> 1654

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-041-Q1-E1-H8

<400> 1654

attccccgggt cgacgggaac ccactatctc ggatttcaag gaatttgatt atgataattt 60

ttcttttagaa ggttgatatt ccttggtgca atccgttggt aattctcctc atgcttatag 120

tcaaaataaa gcttttacca aacatattgt tgggtgccttg atgcaatctt atgatgaaaa 180

acttaatttg gaagtttcta tacctagaaa acttaatgat gagtgggaac ctactataaa 240

gattagaatt aaagatcatg agtgttttgc tttgtgtgat ttgggtgcta gtgtttccac 300

gattcctaaa actttatgtg atattctagg tttcatgat cttgatgatt gctctttaa 360

tttgacacct gcagattcca ccattaaaaa gcaatgggaa ggatcaatga tgttctcaat 420

tggtggaata gaaatttggt gcccg 445

<210> 1655

<211> 375

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-A11

<400> 1655

ccgggtcgac ggggagtcta gtcttttaga gtttcgagtt ctggtcataa gttgtcacgc 60

cgccgccgca ccatcatcat cgcccccgcc atctatcacc accgctccga atccgtatcc 120
 atataccacc accaatccgt gtccatatac caccaccgat ccatatccat atactaccac 180
 caccgctgcc atataccatc accatatatc taccaccaat ccgagttcct tgattactag 240
 ggttgttttc gagatccatc tagttttcaa ttcgtgtttc cttgccggag tcaggtagcc 300
 acgctccggt taggccccaa atttttcgaa aacgcatttt tcgaaaaatt ttccagctat 360
 cctactttta agtgt 375

<210> 1656
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-042-Q1-E1-A12
 <400> 1656

caggcaccgg tccagaaatc ccgggtcgac gggaatgta ctgtctactg atacgtctcc 60
 aacgtatcta taatttatga agtattcatg ctattatatt atccatctta gatgttttat 120
 atgcatttat atgctatatt atatgatttt tgggactaac ctattaacct agagcccagt 180
 gccagtttgt gttttttcct tgtttttgag ttttacagaa aaggaatacc aaacggagtc 240
 caattgacct gccaatTTTT gttgattttt tatggaccaa aagaagcccc tggagcaaaa 300
 gagttggggc agaagagtcc cgggctgtcc acganggtgg gggcgcgccc tccccctgg 360
 gcgtggggcc ctgcctcatg gacgactcgg agacccccct gac 403

<210> 1657
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-042-Q1-E1-A2
 <400> 1657

accggtccag aattcncggg tcgacgggga caacatcaac aacaagctgc agcttgatc 60
 gaagagcggc aagtaacgc tcggctacaa gaccgtcctc aggaccctca ggaactccaa 120
 ggcaaagctt gtgatccttg ctaacaactg cctccactc cgcaagtctg agattgagta 180

ctatgctatg ttggcgaaga tcaactgtcca ccactaccat ggaaacaatg ttgatttggg 240
aactgcgtgt ggtaaataact tccgagtctg ctgcctgagt atcatcgacc ctggcgattc 300
cgacatcatc aacgcaacac cagctggcca gtaaacctgt gcatgccatt ttcagtgtct 360
cgtctgatgc cattttcttg ctggacttga tttggtcttg tgtacatcat ttatcagtca 420
atcaagtttg atgggactat ggtttttcc 449

<210> 1658
<211> 389
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-042-Q1-E1-A3
<400> 1658

cggtgcgacg ggggactaca cctacaacac actgggtcaa aatgcagtgc caccgcagtg 60
agaagcttat gtgcgacagg tgatgaagga agagcatgca tggctttggt ggaagcacct 120
gtgcagcata tttgtagtat ctgggtatat tccatggtgt aatgcgcact atataatttg 180
tgcattccagc caatctcgaa ctcatgtac atagttccat cattagtga gatcatgtat 240
gtgtgaccct ggctggctag ttggaaagga cttgttgtca acatttcgtt ggatgtttgt 300
taagctagct ggtgatagca gtttatgatg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
aagcgccgc tctagaggat ccaagctta 389

<210> 1659
<211> 449
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-042-Q1-E1-A4
<400> 1659

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tagtgaaaac agtcataact ggttacgaga aggaggagg gttatatcgg gagcatgtct 120
gcgagagaga cacctcgga gagagtgcgt gagcatgtgc gagagaccac cgatggagag 180
tgaaactaca cataaaatac tgatgtacgc attgattaaa gatataaatt gtatccaaat 240
attaggatgg gatcatgata ttcgcaattc gcgtaaggaa cggtcattga tccattagac 300

atctagatta tatcgaattt gagcatgtct atgtcattat tcgacataat tgatccacat 360
 agttagtatt ttgaactcca gacaatgcat cgcttttagca atcgagtata aacatgagta 420
 tagttcatgt tgtgtgtata naggacatt 449

<210> 1660
 <211> 303
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-A5
 <400> 1660

gtacggacca gaattcgagg gtcgacgggg agttccaaga gtttagtcaa catgtcaggt 60
 gacatatgga tgccaatggt gactgtcagt aagatggact ttgtgctcgt caggatatat 120
 gaccgtcctc cctgggtctgt caaagcaggg tgtatatact gtgatcattt tggaaacgca 180
 tatattacta caaaaactac catgaaatat actttcgttc atgctatata ttggagcctg 240
 agatagtgca gagtgatggg aatgcagtgt cagtcacaca gaggccgctg aacggcacct 300
 atc 303

<210> 1661
 <211> 464
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-042-Q1-E1-A6
 <400> 1661

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 aatgctatgg ggatcaatat gggtagggt gcggaaggct atgggtggtt tgcggaagtt 120
 atggcggaag ccctaggcaa agatgccaaa gtgccaaaat ttgatggagt aaaatggcgt 180
 tgaaacctat ctagatggat agaggatgtc aatagctact caacgagcta aagaacgcga 240
 aaatcagact ccggatgtga aagttacgac caaaacgggtg aaacaccgaa ggctgaaatg 300
 ccagggggcg gacatccggg ggtggggggc ggatatccgg ggtcagtgtt cagaaccatg 360
 cagatttggt gtcacaggag ccgattgat gaggacatga ctaccttgga tatgaacaaa 420

aatattgcat ataagcatat ttgtcanggt gattctagtg caaa

464

<210> 1662
<211> 408
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-A8

<400> 1662

gtaccggtcc agaattcccg ggtcgacggg gtcagaatta tcttggccaa tttccgatag 60
cgatacactg tcattcttagg aagtacaatc gcgtcacatt gttggtgtag gcacacataa 120
cactggttct aagcacctta aatgatagca ctatttatgc tacacacgta tgggcaatat 180
tcttgatgtg gccaccgtgc ccctatgtat ttaccttcat gtagaatctc ttgatgattc 240
aagtcaagct tcagctgaag ctcccggggg gaagaagaag acagcggtccg gtctaaacga 300
tgaaacctaa tctagccatc gaagctatct cgaatgccgt ccaaactttc atcacgcttc 360
atctagctcg acgtcctttt acaacatcat gattgcaact ccactcga 408

<210> 1663
<211> 404
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-B1

<400> 1663

gggtcgacgg gagtgtctgga ggtggtcaaa gttctctggg ttacctgttt ggagatgggtg 60
agcctgcaaa gcctgtctgca gcaccagctg cgaagccagc acctgtctgag aaaccagcac 120
tggcagctgc cgatgtaacc aagcagattc cagctggcat tccaggtagc cgggccaaca 180
actactaccg tgcagatggc cagaacacgg gcaacttcct tacggaccgt ccttcaacca 240
aggttcatgc tgctcccggc ggtggctcgt ccctgggcta cttgtttggc gggaagtgat 300
ctctgttaat gatgtctgca tgaattggcc tgtatctctg ttatccatgt ggtgaaaact 360
ggaagtgttt ggtttcagca gtttaccacc tgcgtcgatg tact 404

<210> 1664
<211> 397
<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-042-Q1-E1-B11

<400> 1664

cggtaagaa atccccgggtc gacggggaga gagggtgggc cgagagcgac cgtacgtatg 60
tagcaagtgg cggggggcgga cgggagggca ggaggaagaa gaaggcgaga tcggctgtgc 120
aattatttgg cggcttgtct ttagtttctt ttgcgattct ttcccttgtt taagtttacc 180
ctgtagtggt tgtgtgtgtc cttgcgagac tatttcggct ctctgtctgg tctctgcgac 240
ttggtagctt ctcattgggt ccatgggtgt ggatgatgtg gatggaggag gggtcgtgtt 300
agctaagtta gtccactccc tctgttcgtg ttttgtaagt taattagtag tatgtgtgct 360
actagtatat gggactttaa atcgggtcac cggcgat 397

<210> 1665

<211> 358

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-042-Q1-E1-B12

<400> 1665

gggccagaat tcccgggtcg acgggaagat caagaggta tggctttgtt tccttcagga 60
atcaacagga tgcacagagt gccataaatg acttaaatgg tcaatggctt gggaatcggc 120
agattcgttg caactgggca acaaaagggt ccaacagtgg cgaggaccag ctaacatcag 180
attcgaaaag tatagctgat gtaaataacg attttacaga aaatgcaaag cagaagtcaa 240
atgaagatgc tcttgaaaat aatccactgt acagaactgt ttatgttggg aaccttgctc 300
acgaggttac tcaagacgtg cttcatcgtt tcttccatgc acttggtgct ggagccat 358

<210> 1666

<211> 420

<212> DNA

<213> *Triticum aestivum*

<223> Clone ID: LIB103-042-Q1-E1-B2

<400> 1666

gggtcgacgg gtacctccat atctcaaac aatcatcaag catcaaactt ctcttagtat 60

tcaacacact cataagaaag tttttactag tcttcaatac ctagcatatt aggattattt 120
aagaaaatta ccttgctgtt ttaagactct caaaataatc taagtgaagc atgagagaat 180
aatagtttct ataaaacaaa accaccaccg tgctctaaaa gatataagtg aagtactaga 240
gcaaaaacta tataactcaa aagatataag tgaagcacat agagtattcc aataatttcc 300
gaatcatgtg tctctctcaa aatgtgtgta cagcaaggat gattgtggta aactaaaaag 360
aaaagactca aatcatataa gacgctccaa gcaaaacaca tatcatgtgg tgaattaaaa 420

<210> 1667
<211> 443
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-B3

<400> 1667

cggtccagaa atccccgggtc gacggggaag tggattcggg cggagagcga agaagcttct 60
cctcgtgtgg ccgagaagtg agcgggggga tatggtacgc gcgagctacc aaggaagatg 120
gcgcgggccc gcgagcagtg agtgagggtg aatggtgtga ggccgacgat ggggaagaga 180
ggaggaagaa gaagagagga ggaagaagag tggaagacgg ggaagaaagt gcattaaatc 240
tcaattctac tagtactact accaggatat accggacttc ggagtgtaaa tagttactcc 300
gatgacatgt ggggtctacca caagagggtc catatgtcaa ttaatggagg acagagggtgc 360
gtaggcgtat ttgcggaagc gtgctctact ggcaaacatg atggcagtac taggttacgc 420
tgatttagta acaccaacac act 443

<210> 1668
<211> 394
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-B4

<400> 1668

gggtcgacat tcgcccgtaa gaaagcaacg agcgcgcttt cctatttggg gtcaagagtg 60
gcgctgatgg tgaaagtacc accagtgccg cctccttg gcgacacctt cttgggtctca 120
gggtggagctg ccattgcctt cttacgcttg ccggtggagc tcgatgggtgc gtcctcgaca 180

gtagcgcaac actccgaaga ggtgcgcttg cgggagtggg catcagagct cttgccggac 240
 ttggtcttct tcttcccccc gggagcttca gcggaagtg tcttgcgttc tgctgcggct 300
 gctgcttccc ggtagatctt gtcggcacag ataagagcat cctttttgtc accagtgaca 360
 aagatgacac ttatcgggcc atgcattttc agta 394

<210> 1669
 <211> 465
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-B6
 <400> 1669

taccggacca gaattcccgg gtcgacgggg atgcgtgtgc atctggattc tgtatacgtg 60
 gaaggagaag agacaacatg tttgatgaga gagcaggaaa aacatggatg agaggggaat 120
 gatctcgtgg gttgagggat tgacaatttt gtgcggggga gagacggatt ggtaattttg 180
 tgcaagagag agagagaggg tggggggagg agtcagtcag ccgttggtcac atcacctgc 240
 ttccaaatga ccccgcatte tctagtgcgg tgtggtcacc gtctttgatc tgctcgttgt 300
 cctctttgaa gattgaggtg ttgtgcatgt tggggtgcaa agaagcacia gcgagagtgg 360
 tcgccgtata accttggtat gggatgaatt gtgtgctcgg gggagtgtgt gtgtgtttgtg 420
 ctgcatgtgt ctctctctat gtgtgcgtgt gcgtgtgtgt gtgtc 465

<210> 1670
 <211> 443
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-042-Q1-E1-B7
 <400> 1670

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 gtgggtgattt tctttattat actaacggat cttaccgagt tttatgttga agttttgtgt 120
 ggatgtagtg tctaatacgag gatgtttcga tgcgagaaga aggaagagag gcaagagctc 180
 aagcttgggg atgcccaggg caccccaagt aaatattcaa ggagtctcaa gcgtctaagc 240
 ttgggggatgc tggggaggca tcccctcttt cttcaacaag tatcggtatg ttttcggatt 300

cgttttgttc atgcattatg tgcaagtctt ggagcgtctt ttgcaattag gtttttactt 360
 ttctttttat gcaccatgct ggtatgagat agtccttggg tgatttatag aatgctcatt 420
 gcacttcact tataatcttt gag 443

<210> 1671
 <211> 410
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-B9
 <400> 1671

cggtctagaa atccccgggtc gacggggata cagtgaggct cagctgaagg agtgccctgga 60
 ggagtatgca tcttgaacg tgtggcagat ccaccaagc accttcgaca tccacttcatt 120
 cgacgcctga tctgggaagt gaacattcca tcataatcag atgattgtga tgcgcgacta 180
 ggggtgtctga tgcccttgtc tgggatataa caagattgaa agacttcagt ggtagcgtga 240
 aatgtactag tctagtagag ctgttgctat ttgttctgt gaaccatgca ggagcctttc 300
 tcttcagca atttcattgg ttgacactgg agtgtagtaa atgtaactct gttatgtttg 360
 tttaccatt agttgtacgc tttccgacaa tgatgaattt gttctgctcc 410

<210> 1672
 <211> 361
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-C1
 <400> 1672

ccgggtcgac ggggtagcgt aactactgta ccctctgacc ctgccgctcg tctacgtcct 60
 cgacttcgtc ttcggctggg cataggetca tgcttctagt ctggacacac gcttgagttt 120
 gaccctgtcg tgatttttga ctcatgttaa tttatctgtc tagacttgga ggtgtttatt 180
 gtgttcatat ccacgggtgtg cattgtgtat ccatgaatct atcttaagggt ctgctctggg 240
 cgtagcgttt ttgtgtgttc tcttctcttc ggtaatgggtg tattaaacat atccggagga 300
 tactgggagc tacatgctag aaataagctt gagattatta acctatttta tctggataaa 360
 a 361

<223> Clone ID: LIB103-042-Q1-E1-C5

<400> 1675

attcgcggt cgacggggca tgccaatttt tgtgggaaac atgacatgct atttagggac 60
 ttctatccag gcacagcaca gctggtcggt agatacctat gctagagcct agagcctaga 120
 gcaatgcccg tctgcttctg ctgacttctc tegcctgggtg ctgggtggga actgatgatc 180
 gctactggcc atgcgtgatc cctaacctgt gtccctgccag gtgcccgaat aatcacgtac 240
 gtacgtgcta ctctcgcgta ggacctgtac cgcgcatgcc gttccctcgc tattgcgcaa 300
 cagcagagtt tttggtcgca catgtcactg atataaaagt tgcctcgcta ttgcgcaaca 360
 gcagagtttt tggtcgcaca tgtcactgat ataaaagttg ttcgttccgt tgcc 414

<210> 1676

<211> 428

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-C6

<400> 1676

taccggacta gaattcgcggt gtcgacgggg tgtattgctt ggagcgatcat gtattatatt 60
 agtctttgat ttttagttta ccacaatcat ccttgatgca cacacctttt tggagaagcc 120
 tatttgatta taatttgta gaataactcta tgtgcttcac ttatatcttt tgagcttgat 180
 agtttttgct ctagtgttc acttatatct ttagagcac ggtgggtgtct taattttgaa 240
 gaaattgcta gtctctcatg cttcacttat attattttga gagtgtttta gaacagcatg 300
 gtattttcta tgatcataaa attggctcta gaatgatgag catccaagtt gggataata 360
 caaactatca tagaaagtca attggatgct atgataaatt tatgcctgat aattgttttg 420
 agatatgg 428

<210> 1677

<211> 449

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-D1

<400> 1677

cggtccagca atccccgggtc gacggggggc tctaaaaaaa aaaaatatcc gttctcctac 60
 ccgtgagctc gtggccttcc caaagcgctc gtcactttcc ccaatttggc cggacggcag 120
 cctccaaatc tccgattcgt cgtcgccttt gcctccggcc aacaccacca cttctcggcg 180
 gctcgccctc tccgtgtcca gttaatcact gctcgcccc aactcgtaga agccacagct 240
 cgcctccctt ctgccatgga cgacatggca cacgcgcgac gccggcggtc gatttccttc 300
 gatgcctagg ttgccgcctc tatctccact tcgtccgttc ttgcataggc tttgtacggc 360
 tttggtagtc agcccgccgg agcccaaat aaggacacgg acatcgggtc cgctgcgtc 420
 gtcgtcaagc gcaagctcct ggtggatgc 449

<210> 1678
 <211> 253
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-D10
 <400> 1678

cggtcaagat atccccgggtc gacgggaaag agcttaactt ttttactctg aatttgaccg 60
 gtgatgtgtg tgtatatatg ctacatgctg cttttcaaaa gaccctgaca tgactaatgg 120
 tgggtcctaa gatggctgag actgtttctg gatgtttgtt ccgacaatgt tgttgaatta 180
 gtatgtgata aacaacgttt accttctact aaaacaaaaa ctaattacaa aaaaaagaaa 240
 aaatattatt tac 253

<210> 1679
 <211> 316
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-D11
 <400> 1679

cggtctagaa atccccgggtc gacgggggta ggaagaagtg ggggtgggtg gtcattgggct 60
 ccaagtcgca agcgaagacc aaggccagg aaaggcttat cgcaaaggac gctgcgcagc 120
 ggatgaacta agtttagcat tgttgaacca tatctattcc tcacacctga gtagtgttca 180
 agcatactgt ggctgtttgg ctccagtttt ggcagtcatt tttgtttgtc tgagacatct 240

<210> 1682
 <211> 391
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-D4

<400> 1682

gggtcgacgg ggacggcaac agccctcacg tcgattgagg ttgcttagga ataggctctg 60
 gaagagaaaag aactttgggtc ttcagtttca aagattgtgc acttgctgc gatacctcac 120
 gcaaaacat caggctttct tgtctcttag ttttcaggac ctaacaattt gtggatcatc 180
 attgttaata agcttatggg ctgggagccg cgaaacagac atccgagaga tgaaaactgg 240
 ttgacattgt cgggtgtgtat attgttgcac tgtatgtata agtggatctc atcaccaagt 300
 agtggatgatg aaatggcgcc tgtgtggctg tgtactcgaa agtcgaaatg cagttccaga 360
 tttcatttga aatgtctgcc ttcgtgtgtg c 391

<210> 1683
 <211> 379
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-D5

<400> 1683

cctgcaggta ccggaccaga attcgcgggt cgacggggag gatgaatacc aggattaacg 60
 cgaagaccaa gcccaccacg aggactaaac atgacgagcg aagcgagtat gatgaatgac 120
 tacgttatga cgcacgcac agcatggaca gtgcatatga cgttcttttg gattaatgct 180
 tctgctgat aaattcatca cctttatagg tcgcaggctg taaaatctct gcatgttgct 240
 gcttgcttgt tctgccactc gatatgctca aatcctatct caacttagca tactacattc 300
 tattccttac aaagtgtcat caaagttcat tacattggac tgcgtttaaa atcatgattt 360
 ctgaçaaaat tctgttcta 379

<210> 1684
 <211> 462
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations

<400> 1686

cctgcccggca ccggtccaga aatcnegggg cgacgggatg acgtagcggg attctcgaga 60
gatgaactac gatagcaagc tccaaaacat gagctgggtc tgctacaaac gtgtgaacac 120
gttgtcccag acaagcatga ccacgtggta gtcttataat aaaacactac cgagttcagg 180
agggggaacc atcaacgagg gtatcgaagt tctttcataa gtccggatta gctcttatga 240
aggaactcct tctccttgaa caaatcaatc agtggccttg tgtgctcggg acacatatgg 300
aatgaagggt gcaagtctcc agaccacaga atacttcgca cgtgtgcatg actgatttgg 360
gatgattcca aggaaacaag acaatcttcc tcaaattcat ggccggcaact tgcacatcat 420
gcacatgaat tanggaaagt cactactttc atccaaacat ata 463

<210> 1687

<211> 429

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-E11

<400> 1687

cggctctagat atcccggggtc gacgggaagc gtcacaatac acttcataat ctttgtgttg 60
atctggtaga atcaaacactg gtgatgtaac caagcgtctt ttcaactcct gaaaactggc 120
ctcacattcc tcagtccaat tgaatttggt gtccttcttc aacaattccg tcataggctt 180
tgcaatcttt gagaaattct caatgaacct ccggtagtat cctgcgagtc caaagaaact 240
ccggatctct ccaactgtcg tgggtgactc ccaatttgtc acagtgttaa ccttgggtggg 300
atctactgct attccttctc cggatataac atgtccaagg aatccaactt cctttaacca 360
aaactcgcac ttgctgaact tggcatataa ctaatgttct ccgagctttt caagttccaa 420
acgcaaagt 429

<210> 1688

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-E2

<400> 1688

caaaaaaaaaat tagggtagt tcatcatatc cgaaccaatc tgagcctttg cataatcttt 240
 ttaggggtttt gccttggtga atttgcgggt gcacgctcgt gtctagttgc tggctctaga 300
 gtctagtcctt ttagagtttc gagttctggt cataagttgt cagcgccgcy ccgcaccatc 360
 atcatcacc ctagcatcta ccaccaccgg cttatccgcc agcgcttcga atccgtatcc 420
 atataacacc a 431

<210> 1693
 <211> 451
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-E8

<400> 1693

atcgcgggt cgacttcac caaagcgata tccatcatct catcgaaaga cgggacacct 60
 ttgcctctat caagtggat cagaattcca ggttgctcgg tgagatttta cagtttttcg 120
 tagtttagat cgagtctgtt cttcatacct atagtccacg aaaaagccaa aaaaaattag 180
 ggtagttca tcccatccga accaatctga gccttgcata atcttttctc tatttgcttg 240
 gttgaatttg cggttgcac gtcgtgtcca gttgctggtc ttagcgtcta gtcttttaga 300
 gtttcgagtt ctgttcacag gttgtcacgt cgccgctgcc atatatcacc accgcatcat 360
 catcgtcgtt gttgccatat accaccacca catattcacc gccaatccga atccatatac 420
 gccaccacat atccgccgcc atcacgcaa t 451

<210> 1694
 <211> 385
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-F1

<400> 1694

gggtcgacgg gggttgatat ggcagatatg acttctttga aaaagacaac tacggagcac 60
 gatccggtgt tgaagtttaa atcgccaca gacactaagg tggttgactt tgttcccggc 120
 gattcatcca agcagttcaa catcagcact aacctggatc ccaaatagga aagtgcgctc 180
 atcgagttca tccgtgagaa ccaggacatc tttgcatgga tgccttctga catgctaggt 240

gtaccaaggg aactcgttga gcacacactt aatattgatc ctatgtttta accggtcaga 300
 caatttctcc gccacttcaa cgaagaaagg cacaaggcta ttggtgaaga ggtagctcgg 360
 ttgttggtcg caaggtttat cgtgg 385

<210> 1695
 <211> 359
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-F11
 <400> 1695

gggccagaaa tcccgggtcg acgggacctt tatgataaga ggatctccca ggaggtagtt 60
 ggtgatcttc ttggtgagga attcaagggt tatactctca agatcatggg tggatgtgat 120
 aagcagggtt tcccaatgaa gcaaggagt ctaacttctg ggcgtgtccg ccttctgctt 180
 cacagatgca caccttgctt ccgtgggttt ggcattgcga atggtgagcg caggaggaag 240
 tccgtccgtg gttgcattgt cagccaagac ctatcagta tcaacttggg gattgtcaag 300
 aagggtgaga atgatctgcc aagccttaac gacactgaga agcccaggat gaggggacc 359

<210> 1696
 <211> 376
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-F2
 <400> 1696

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 ctgatggcac caacggcgct accaagttca cctcatccta cgctagtctg ccgtgtccgt 180
 gaactgatgg cggcattctg tatgtagttt agcagtacca ttttacaacc tttgtaagaa 240
 ttgtgctgct gctacgggt ctgaagaaac agtgatgtcg tttgaatcag accggatcaa 300
 acaatttctc cgccacttca actaagaaag gcacaaggct attgatgaaa gaggtcgctc 360
 tataggatcc agcctt 376

<210> 1697
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-042-Q1-E1-F3

<400> 1697

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 ctggacgagg agtagcggac cctgcgagggc gaggggttgag gaagacagcg gggggcgagc 120
 ccggtatgcg cggcaggcag cgcgaggggc gaagatgtcc tcgagggtcg tcaagcggct 180
 tgcgatcaac gggatcagct ccggtaggaa gtagggcgat ggcgaggtgg tttcttcggg 240
 gtttgtggag gatgacgacg aggacgtggt gattgtggac gcgagggcag tggccgcagg 300
 caagcacctt gtccggcgct tccccgactt cccaacgaa cccattcctc gccgccgcat 360
 cttcaccgag tgcgacgctg cgtgcggtac tggaggtgaa tgt 403

<210> 1698
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-F5

<400> 1698

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 ctggccgttg ctgctgcaa cataaccgcg cacagtgtga catccacatt gtatacgttg 120
 agccacctag cgatggagct caattctttc atcgattact acaagtatat ggttgatttg 180
 atagtgagcg tcattcatga cttgcacgcg ggatgagatg ctcaagtgat ataccaaaag 240
 ttatatgatg cctcattgtc tcattgatgc ccctaagttg ccatatggca ttgttgcagg 300
 gatccgggaa gaatcctgtg tgggaagaga acatagaaaa cgaagagttg gcccaaatag 360
 ccagtagcat cacatttttc gaaataggct ttcaccctgc ttttaagtct cgg 413

<210> 1699
 <211> 458
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-F6

<400> 1699

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ggcagatgcg ctgcggtgga caacatgctc aaactcacat aatcccagtc aaatgagaat 120
ctaaatgcat ttcatagtta ttactttgta ggatgcaaca aaaacaacca taacgctaca 180
tcagccatta tataagcaac attttgacat atcccaatgt gtgaatgaaa cgtgcagaga 240
gagcttttga agatggagca gatagggcgg gaaagattgt atgtatgtgg gcgagagagt 300
acgagacaaa cctaacgaga cagagagaga gatacagtag agaaagagag aggaagaagt 360
taggtctgtg agacagatgg atacatgtaa tagacatgag atgcgtgtac atctggattc 420
tggtagacgt ggaaagagaa gagacgacat gtttgatg 458

<210> 1700

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-F7

<400> 1700

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gacgaagtgt ggatgtcatg tcgcgccgga taagtcaatg aagaattgct cgctttccac 120
gccgacctgg ttgtgttgat gccgcaagag ctcgatggag tcggcctggg ggagatcgca 180
tcggtgcgcg tgcagtgtag tcgatgcacg tcgcttgacg atggttctat cgctcggtgc 240
agtctgccgg cgccgcgccc atcgttgttg gcgtagtcgc gaaaactgaa gaagtcgatg 300
tagcgactcg agtcacagct gacgaggcca gatctgatcg atcgcgatcg aagccgcccg 360
tgcgtctgta gacgcgtacg tgtaagctca tattgatgca tgcacg 406

<210> 1701

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-F9

<400> 1701

acagaatctg tcaaaaacag aacagtctgt agtaatctgt atcaaacgta tacttatgga 240
 accccaaata ttctgaaata aattggtgga tgtgagtaat ttgtctatta atcatctgca 300
 aaaataatga acctaaaatc actctccagt aaaaaaatgg cagctaattct cgtgagcgct 360
 aaagtttctg 370

<210> 1704
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-G3
 <400> 1704

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 aacaactagg agaggctcgg tggcgctctc accctgttca acccgccac cggcgaggcg 120
 ctgtcacttc ccccgatgcc gtacgccggc ctcttctctg agagctctca ttggcggaac 180
 tggaacgaga cttacacctt cgcgccaccat ccgacgtccg ggtggtacaa gctgttgcg 240
 gtccccctgca ttttcgaccg ggtgtttgag ccggaagccg tgcacgtgct cacgctgggg 300
 gaggcgtcat ggcggaaggt gctcaccggc atcaacggct gggcggggtg ccgcctcggt 360
 ccgggcatcg tcagcattga cggcacgacg tactgggtca cgcgtgatgc tccg 414

<210> 1705
 <211> 460
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-042-Q1-E1-H6
 <400> 1705

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 gaatatctag tgcagccgct tggccgtgct gaagatgaag agcattccag tgactttgag 120
 ccggaagaaa atggtgatgg tgctgaggat gaggagattg aggatgatga tgctgaggat 180
 ggtgaggatt ctgtcaagcc gcaatcctca tcgaagagga agaggtctgg tggggaggat 240
 gaagatgatg atgacggtga tgatgatggt gatgatgatg agaagcctcc atcaaagcga 300
 tagtcaattt gttcttgctg atctggtatc ttttctgctt gggccaagaa ggaaaataat 360

cctctgggag aggattgttg gtaaagtctg tagctttagg acatctgtgg taggtgtagc 420
agctcgaact tgagtctaac catgttagtt gtagtgcat 460

<210> 1706
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-H7

<400> 1706

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aagttggaag ctgcctgcaa ctatttgaag ttactgtatg attctgcaca tagcatcatg 120
gttgcggaac atccaacttc caacttattt ttccatgagg cgtggaaact tcagctggaa 180
ctgtcaaagt ccataaccca tgaagatcca gttttcagta gcatcgccaa agaaatgcat 240
gagagggttg acaagtactg gtaggattgc aaccttggtc tatccattgg tgttgatcatg 300
gaccctcgtt tcaagatgaa acttgatataa ttcagttatt ctaaaatcta tgggtgtggag 360
gcatcaaagt atcttaatgt ggtggattat gctcttcatt acctt 405

<210> 1707
<211> 455
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-042-Q1-E1-H8

<400> 1707

attcgcggtt cgacgggcaa gaagaaacaa tctctagggc tagacacaaa gagccggttt 60
accggcgact cctcgtgat cataatgaga cctagcctca aacagtatgt aggggtgtta 120
cgggatgatg tttccaggg cccgaagctg tctaaatcct tgtcttgtgt tgcgtctctc 180
gattccgctc aaccctctc aagctaccac atagatgtgt tagcctcgcg actaagtcct 240
gacaaaacca cgacattact tgcttatgct aaccatcatg acatcacttt atatcaaatg 300
gatgtgaaaa gtgcgttcct caatggtaag cttgaggaag aagtatatgt tgctcaaccc 360
ccagggtttg aagatccaaa gcatcctgat agagtcttca gacttaataa gggcctctat 420
ggcctcaagc atgcccctcg ggcgtggtat gatac 455

<210> 1708
 <211> 432
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-A10

<400> 1708

gtaccgatcc agaattcccc ggtcgacggg gagacgcacg gaggtcgggc cggcaccgcc 60
 acccagaacg ggtcacggat gttcacgtcc ccgaatttct tgggcgaaca tgccgctgcy 120
 gccggcgag gcagccggag aaaggaagcc acccactgag ctgagccgga gatgactatt 180
 taacgggaca tcaatggacg gtgagatgtg cgacttgggg aagatcgacg gtggtcatat 240
 cagcttgacc ggtcagagtc aatgctctat ttcttttcca tttccgtctt tttaaacagt 300
 ttcccttaga tttctgggat gccgttgac agccgcaatg ccatggcgac tgccaggagc 360
 tcccgacatg gaccgcaaaa gcgaacgcga ccgcttgcca accagccatt aattttgcat 420
 tgctcgctac ac 432

<210> 1709
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-043-Q1-E1-A11

<400> 1709

attccccggt cgacgggcaa gctcacacca atgaggttag caagggcaaa ccactagatt 60
 gggtttcagg acaaccagtc acagatgagc atggacgcct tcagattata aagaatgatg 120
 acctcgaaga gctccaagaa ctcggttctg gaacttttgg aactgtatat catggtaaata 180
 ggaggggctc tgatgttgca ataaaaagaa tcaatgacag atgttttgct gggaagccat 240
 ctgagcaaga aaaaatgcgg aatgacttct ggaatgaagc atctaactt gctgatctgc 300
 accaccccaa tggtgtggcc ttttatggtg ttgttctaga tgggcctggg ggggtccattg 360
 caacggttac agaatacatg gttaatggct cacttangac ggctttgctg aagaattcca 420
 agagcctgga tcgacgcaaa 440

<210> 1710
 <211> 467
 <212> DNA
 <213> Triticum aestivum

 <223> unsure at all n locations
 <223> Clone ID: LIB103-043-Q1-E1-A12

 <400> 1710

gtaccggacc agaattcncg ggtcgacggg gagagcttgg atgtaacatc ggtgagccag 60
 gtcccggcca ctcccagcgt ggccacggca cgcgctcaga gagcaagcaa gactgcggcc 120
 ctgagcaagt tcaagtcttc tgtgaagcct tctctcgagg ctgcttctga cagtgaacaa 180
 gacgagatgt ccggactgac aactgatgag gatccgtctg atgattccga cgacctgac 240
 gaggaggagt cttaagttct tgggagctga ggtatctgct ggcgttcttg accggaagaa 300
 cccagcaatt gttatttgag gtatgcaggg tgacactgcc actatgtatt gtttcttttg 360
 aaccagtaga ttatgtattc atgtgctctt cagcttgcaa agctgcaaag attatgattt 420
 gattgtgtgc gtagattcga ttcaaggatc aatgagattg tataaag 467

<210> 1711
 <211> 422
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-043-Q1-E1-A8

 <400> 1711

ttcgcgggtc gacgggggga aagaaggctt gaggctggtg ccatggttct tgctgatcgt 60
 ggcgttgtct gcattgatga atttgataag atgaatgatc aagaccgagt tgctatacat 120
 gaagttatgg aacagcaaac tgtgaccatt gccaaggcag gaatacatgc atcgctaaat 180
 gcaagatgta gtgtaattgc tgcagcaaat ccaatatatg gatcttatga tcgttcaata 240
 acaccaacaa agaacattgg gcttcagat tctactgctct ctcgttttga tttgcttttt 300
 attgttctgg atcaaattga tgctgagatc gatcgccaga tttcagaaca tgttgcacgg 360
 atgcatagat actgtgctga tgatggagga gcaaggctctt ttgataaagc aggatatgct 420
 ga 422

<210> 1712
 <211> 405
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-B11

<400> 1712

gggtcgacgg ggagggcgag tacgaggacg aggaggacga tgccgacctc caggactaga 60
 gatcaaccga gtaccgcgta tgattattgg ttttcttatg ttaatttgat gattgtttta 120
 ggcttgtgta gtgctgtttc tgtctttctt ggtgggtgct gttgttgagg agcagaaaac 180
 tcatggaagg gtggttgctg gtgagatagc ttggtataac ctctggcaca attgctgtgt 240
 gcaagcaacg cctgttgcg ttctactggg aatgggtgtg gttgtctggt gtccagtgtc 300
 caactatcat gttcaaatct aatgtaattt gaagttgctt gcgtctaaaa aaaaaaaaaa 360
 aaaaaaaaaa aaaaaaaaaa aaagggaac tccacaagac tcaaa 405

<210> 1713
 <211> 468
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-B12

<400> 1713

gtaccggacc agaattcccg ggtcgacggg ggctctaccc gcttctaaca aacgcgcgca 60
 cactccctct cgctctcgcg gcgcaggctg gaggctaaaa ccctagacac aggcgactat 120
 gacggcgccg gcggacaagg ggaagaaggc caagaccgac accgacgtcg gcgaggagaa 180
 cgagcagatc gacggtgccc tcgtcctctc catcgagagg ctccaggaga tccaggacga 240
 gctcgagaag gttaatgaag aagcaagtga taaggttttg gaggttgagc agaagtacag 300
 tgggattcgc agacctgtct atcttcggag gtgtgacatc atcaaaacaa ttccagactt 360
 ttggctgaca gcgtttctaa gtcacacctc tctcagttag cttttgactg aagaggatca 420
 aaagatgttc aagtacttgg aatctgttga tgttgatgat tctaaaga 468

<210> 1714
 <211> 402
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-B2

<400> 1714

gggtcgacgg gtccatagat attgtcatca attacaaaa ccaaacatgg gggcaccgca 60
tggtctttca atctttccac cgttccgttt attatgacac tcttcatcat tgtcatcttg 120
atttgcata tcatgtagtt gacattgtat ttgtggcaaa gccaccgttc ataatttttc 180
atacatgtca ctcttgattc attgcacatc ccggtacacc gccggaggca ttcacataga 240
gtcatatttt gttctaagta tcgagttgta attcttgagt tgtaagtaaa taaaagtgtg 300
atgatcttca ttattagagc actgtcccag tgaggaaagg atgatggcga ctatgattcc 360
caaaaaaaaa aaaaaaaaaa aaaaaaaaaa agcggccgct ct 402

<210> 1715

<211> 459

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-B5

<400> 1715

taccgatcca gaattcgagg gtcgacacag tgcataagat gatggacat gacatcaaag 60
aatgacgatg ggaaagacat ctctatgttg cacaatattc ttgcaatatc atcttgcata 120
tgatccaact ctctatgatt taacctttct gccatagatg gttgaagaaa tcatacaggt 180
cattgactgt gtttcttata tcttgtcaa tcagattcat gatggctagc aaggggattt 240
gtgtcaacat tacgttgcag tcatgtgact tcatgtgtca caacttcatt taagctgagc 300
tcatatcgac cggacatgtg atgtttgcgc attaggaaga cgggtgtctta actgataaca 360
atgttgtgta gacctgtgtc gcttctcttg tactgaaatt tgtaatctgg ggagctttca 420
tgaattttgg atcaacttct gcttcagtca tgtgttttg 459

<210> 1716

<211> 467

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-B6

<400> 1716

gtaccgatcc agaattcccg ggtcgacggg gagctcggtt ttgaaataga gataaataat 60
 attttgagcg gcatactttc attgtcaaca aaacaaccga gagatggcga tatcttccat 120
 gctacacaca ttataggcgg ttcccaaaca gaatggtaaa gtttatactc cccctccacc 180
 aacaagcatc agtccatggc ttgctcaaaa caacgagtgc ctccaactaa caacagtccc 240
 gggggagttt tgtttgcaat taatttgatt tgatttgcac aaagcatggg actgggcatc 300
 ccggtgacca tccattttct cgtgagtga gagcggagtc aactcctctt gagaataacc 360
 cgcctagcat ggaagatacc gacagcccta gttgatacat gagatattcg agcatacaaa 420
 acagaatttc atttgaaggt ttagagtttg gcacatacaa atttact 467

<210> 1717
 <211> 438
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-B7
 <400> 1717

taccgatcga gaattcgagg gtcgacgggt gaagaaaacg catcttgtca aggctgctcc 60
 ggcggacaag tcgggagctg ctgtgcgaga acggacctga gctgtgtgcg gtggtgtcat 120
 aaggagccta tccatctcca ctagaattat cccaagtttc acttcacatc gtgatgttgt 180
 tttacctttt tctgtcatt gtctgtctat aacggatagc gctccctgtt ggcgcgcgcg 240
 ccggcgggga tgccctagtg gtggagggtg tatgtcctct tccgcggggg gccctgtctt 300
 gtacctagat gggtactctt tccgtccatt gtcgcccggc aacattgtga taatatcagt 360
 ctgggtaatg ttagattaag ctgttgcct cactgacaa aaaaaactta caatccaaaa 420
 aaaaaagcg gccgtctt 438

<210> 1718
 <211> 458
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-043-Q1-E1-B8
 <400> 1718

taccggatcg agaattcccc ggtcgacggg gtgtgtgtga ttcagggcat acggtttagt 60
 taaattaacc gttttcgatg aggaggaaca aaagaaacgg gcagccagat gaaggtgtgt 120
 gcgatgtaca acatatgggt cactcggatg aactgtttgt gattaggcaa cacaaaagaa 180
 acggttaagcc agatgaaggt gtttgtgata tacggcatga gggtcactcg gacgaactgt 240
 ttgcgttgac acaagagaac agaaacgggt caacttaaca agacatgtgt gttgtgcat 300
 gggattgcat acagaacaac aacatacaca cacacacaca cacacacact tataaggaca 360
 tgcttgcata accaaattaa acatccactt agataggtgg ctactacaac catggcattt 420
 gcacacacca nagtanacta ttacatgcat aattacat 458

<210> 1719
 <211> 359
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-B9
 <400> 1719

tccgggtcga cggggacggg atgccgccgg ttcgaagaat ggataaaggc ctcgactcct 60
 gcgagtgtg caggcagtag gtccgggtcg gcggttgccg gagacgtcgt cgggcggagc 120
 agttgcaggc tgtttgggtt ctccctgact gatcagaaag tgctgggaag agcaggtgag 180
 ggtggtgcga aggaaggggg cgcggtgat gaggcggcgg attgcgcgga cccgcgggtg 240
 ctgcacctgt ttgggcgcgg ccacctgcc cctgctgcgc tgcattgcat cttcgtctgt 300
 cccctgggaa tttgatggta atctcacct gcttgcttcc aattaccgga catttgggt 359

<210> 1720
 <211> 457
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-043-Q1-E1-C11
 <400> 1720

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 cgcggcggcg gagccttccc gggcgctcac cggacacgcy caacaacact atgaggaggt 120
 acagcccccc acaccgtagt cccccgagga ggggatatgg tggcagcccc gcgcacgta 180

gtcccccaag gaggggatat ggtggcagcc ccccgacccg cagcccccca aggaggggat 240
atggtggcag aggaagaagc cccctagga ggggtggata tggaggacga aaggagcagg 300
gttctggaag tctcttggtc cgcaacatcc cattaagcgc cagagcggag gatctccgtg 360
ttccttttga aaggttttgt cctgttaggg atgtttacct tccaaaggat tattacagcg 420
gggagccccg naggtttgcc tttgtggagt ttgttga 457

<210> 1721
<211> 460
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-043-Q1-E1-C5

<400> 1721
gtaccgatcc agaattcgcg ggtcgacggg atatctcata actgaaacca tgaacaacaa 60
gtgcttttgt tctggtggtg gcgatccatt gcttgaggcg acatcgtgtg caagattatc 120
cttgtggagg ccgttggcac ggtggcacc cctcgacct gctgatccca ttaccaggt 180
tgctgttgc gcctaaagg tggatatatg gtgatatggt aatgccgatt tgggaaagca 240
ggtgtacagt gtgtgtaa atagaaaaca atttataatc tgtgatgtga tcattgcatt 300
ttaatttagt atatgcgact caagtaggga agtattgagt gcacctctct ggcaagtga 360
cgcataaggt accatttttt actcaatcga tttcaaaaca aggcattgaga ctgacatata 420
ctcttttatt gcatcgtgta aagatatgtg gtgtgaaggg 460

<210> 1722
<211> 450
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-043-Q1-E1-C7

<400> 1722
taccgatcta gaattcgccg gtcgacgggg cagatatagt gaggagggcg ctgtgctacc 60
cactcaaatt gatcgccaag aatgctggtg tcaatggcag tgttggtacc gagaagggtc 120
tttctaacga caacttcaag ttcggctaca acgctgccac tgggcagtac gaggacttga 180
tggtgtgctg tatcatcgac ccactaagg tggtgagatg ttgcctggag catgccgcgt 240

cggtggccaa gaccttctg acgtcggacg tcgtggtcgt tgagatcaag gagcccgagg 300
 ccgcgcccct cgccaacccc atggataact ccggctttgg atactgatga gcaacacagg 360
 ccgagtttct cctgaggacg tggtttaatt tttggtagca tgaaccaagt tttgagagat 420
 tgatgatgat gatgatggta attttgagat 450

<210> 1723
 <211> 427
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-C8
 <400> 1723

gggtcgacgg gaggttctac ttggcacaaa cactaactaa aagacaaaac cacatccaaa 60
 cagaggctag atggattatt ttttctaaa cacaagcaaa aacagaaaac acaaaataaa 120
 attgggttgc ctcccaacaa gcgctatcgt ttaacgcccc tagctaggca taaaagcaag 180
 gatagatcta ggtattgcca tctttggtac gcaatccata agtggctttc atgatagatt 240
 catatggtaa ttttattttc tttctaggga agtgttccat gcccttcttt aagggaaatt 300
 ggaatctaatt attcccttcc tccatatcaa taattgcacc aattgttcta tggaaaggtc 360
 tatcaagaat aataggacat gaaggattgc aatctatc aagaacgatt aaatctacgg 420
 gcacata 427

<210> 1724
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-D10
 <400> 1724

attcgccggt cgacgggttg aatggattca ttccttgttc gtgtattacg ccacaatatg 60
 caccatgttg acttaagtgt tccgcaagct gggttgtgat aaccacaaag tgtacgggat 120
 tgcaatagtt ttcgagggtg gagtattcaa cccaaattta ttgattcgac acaaagggag 180
 ccaaagaata ttctcaagta ttaacagttg agttgtcaat tcaaccacac ctggataact 240
 tactatctgt accaaagtgt ttagtatcaa agtactatgg aagtaacggt aacgatagca 300

atagtaatat ttttgggtta tgtagtgatt gtaacagtag caacggaaaa gtaaatagtc 360
 agagaacaat atatgaaaag ctctgtatgca ttggatcggg gatgga 406

<210> 1725
 <211> 424
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-043-Q1-E1-D12
 <400> 1725

cgggtcgacg gggaggaaga gcccgaggag gagctaggaa ctgaatatct agtgcagccg 60
 cttggccgtg ctgaagatga agagcattcc agtgactttg agccggaaga aaatggtgat 120
 ggtgctgagg atgaggagat tgaggatgat gatgctgagg atggtgagga ttctgtcaag 180
 ccgcaatcct catcgaagag gaagaggtct ggtggggagg atgaagatga tgatgacggg 240
 gatgatggtg atgatgatga gaagcctcca tcaaagcgat agtcaatttg ttcttgctga 300
 tctggtatct tttctgcttg ggccaagaag gaaaataatc ctctgggaga ggattgttgg 360
 taaatgctgt agcttttagga catctgtggt aggtgtaaca gctcgaactt gagtctaccc 420
 atgt 424

<210> 1726
 <211> 437
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-043-Q1-E1-D4
 <400> 1726

cggtcctaaa ttcccgggtc gacggggctc tccatggcgt ccaccttcgt tggcaactcg 60
 acctccatcc aggagatggt ccggaggggtg agcgagcagt tcaactgcat gttcaggagg 120
 aaggctttct tgcattggta cactggtgaa ggcattggac agatggaggt caccgagggc 180
 gagagcaaca tgaacgacct cgtctcggag taccagcagt accaggatgc cactgctgac 240
 gaggagggcg agtacgagga tgaggatcag gaggctgagg aggacatgta aggtgggatg 300
 tccatgtcgt gctttgctgg gtgggggttc tgggggcaga gtttgatctg tttggtgctt 360
 tgttataaat ctgtttatca tcgcaactac cgcttgtagc ccaccgcat tcttctgcc 420

tttcctaagc tctgtat

437

<210> 1727

<211> 445

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-D5

<400> 1727

attcgccggt cgacgggggg aaaacgtaat cgtttgtgca gttcactggg agaaaaaatt 60
gctgaactta agaatgaagc agaaggtatt caaagaacaa tcgtggaaaa gaacgggtcag 120
aaaagcaagt tagttaaaga tcgatgagc cttgaacaga aaatagcaga ttcgaagaga 180
aaacgagaac ctgaggagta ttgttttagag aaaaaaatac tggaacttga tgacgccaag 240
agagcttttg ctgaaattaa tagatatggt gctgtggata aactgaact agaggaggac 300
ataaagaaag agaagaatat cattgtggag aggggaactat tacttaataa gattaatata 360
aagttagcag cagcttcacg agaagtgaac gatagaagag aagcttataa gacctttatg 420
gattctgtga atgaggagac agggg 445

<210> 1728

<211> 450

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-D9

<400> 1728

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tcgtgagctt cctccttctg tcttttcatg aggcaccctc gttcgagcca acaagccggc 120
gcacctctcc tgggtccgggc cccacgggta tcgtgacgag aagcatgctg ctactttgaa 180
gcacaagtgt ggaaaaaaag gatagtagca ttgcccttt tttgggacaa tgctctatta 240
atgatgatca tcacacttct atttatttac aactcaatga ttacaactcg atactagaac 300
aaagtatgaa tctgtatgaa tgccttcggc ggtgtatcgg gaagggcaat gaatcaagag 360
tgacatgtat gaaaaattat gaacgggtggc ttgcccacaa atacggtgtc aactacgtga 420
tcatgcaagg caatatgaca atgatgatgt 450

<210> 1729
 <211> 416
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-E1

<400> 1729

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 aggtcgagcc gctcgtcaac atggggccaga tatccagggc cacctgcccc atgaacctct 120
 ccctcgccgt ggtggcggag ctgcacgacc tcaccgtcgg tggcctgata aacggctacg 180
 gcatcgaggg gagctctcac atctacgggc tcttctccga cacggtgggt gcgctggaga 240
 tcgtcctggc tgacggccgg gtcgtccgag ccaccaagga caacgagtac tccgacctct 300
 tctacggcgt gccctggtcg caggggaactc tcgggttcct tgtttcagct gagatcaagc 360
 tcatcccat caaggagtac atgaggctca cctacacccc ggtgaagggc cccctg 416

<210> 1730
 <211> 441
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-E2

<400> 1730

ccgggtcgac ggtgtgctt cacttatatc atttgaagtt tggattgcct gtttctcttt 60
 acatagacaa ccgccatttg tagaatgtc ttttgcttca cttatatattg ttagagcacg 120
 ggcatatctt ttgtaaactc tcttgcttca cttatatcta tttagagaga tgacaggaac 180
 tggtcattca catggttagt cataaaatcc tacttaaact tgtagatcgc tggatatgat 240
 atgtttgatt ccttgcaata gttttgcgat ataaagatgg tgatattaga gtcattgtag 300
 tagattaatt gtgaaattga gaaatacttg tgttgaagtt tgcaagtcct gtagcatgca 360
 cgtatggatga accgttatgt aacgaagttg gagcatgacg tgtttattga ttgtcctcca 420
 tatgtgtggc ggtcggggac g 441

<210> 1731
 <211> 461

<212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-043-Q1-E1-E5

<400> 1731

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 caacggatcc tcatacgggg aggtggacga gggacgtcga gctgttgcaa tggatgatgt 120
 catcggggaa gaggctccgg ctgggcagcg gtgacgtggc agacgaagga ggggtggggtt 180
 tcgcggtctg agcggagagg ttatggcggc ctgggatttc gaatggcgaa aagggggcgga 240
 tgggaggggg tgaagcatga ctttaaggaca cgcttgcca aatgtagag tgtgttataa 300
 aagtaccccc caccgatttg aactagcggc cctttcggt caggggttaga agggggattt 360
 cacttttcgg gatttggcag ctggaggag ttttcacgcg cgttgtaatt tgggatagca 420
 aggcgcggtt tgtgaaggcg ccagttttga gagcacgata t 461

<210> 1732
 <211> 336
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-E6

<400> 1732

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 ccaagaagaa gaaatgatct gctttcctgc tgcgtgttt cagtcctta gtttatctgc 120
 tgtctagatg atgattgagc gggctctgga cacaccgacc tatgtagctt ctgtgtcgtg 180
 gtggtttgat gtctcatagg gtagaacatt gaacttctaa tgttgtttcc tgcgttgtgc 240
 aagtagtctt aacatttcgg tggtgatgtc tgtgtttatt ggagctgtga taccattcaa 300
 tctaattctt gttactcaa aaaataaagg ttagaa 336

<210> 1733
 <211> 382
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-E9

<400> 1733

ggtcgacggg gagcattttg gttttcttcc gaccaaattc tcagttctgc ctggtgcagt 60

agattttcttc agctagaccg ctgtgctatt tcttcctgta ggatttcgac gaacagaaga 120

cgcgatgatcc ttggcagact tgctctgtcc acctagtcaa tttgttgtga catagatcac 180

cacgttcgtc ctctgtttac gctagcttaa gatggcacga caatcggggt gctcgactta 240

ctcatcttct ggtcaggtag tacgtacatg aaacacagta gttgctgcgc ggaagcacc 300

accatgtaaa ttctatgcct gtacgcacgc agcatataat agtcagtcgt tgggtgttcat 360

acacaagctg tagaatcaca gc 382

<210> 1734

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-F10

<400> 1734

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tagatcgagt tttgagttga tttttttaag ttatagacct accccgcagg tatgttgtag 120

attttttcat atttttttag gattacctaa atatgaaatg tttgggttga ttctacgac 180

ttaccgtggc ccagtgtctt ttttagggac gtgccatcat tcccctcatg atcgttggtc 240

tgctaataaa tttatttctt gtttaatttg gctacccac aacgtgggta cgtaataatc 300

atggcttaca tgattccgtt caaacacata gccttttgct aataacaagt ccagtaatct 360

aacccttaca cttacacgtt caaccatat ccaatatggt ttgatgcaac ctttagaaca 420

ataaagaccg ggaaattacc ttt 443

<210> 1735

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-F12

<400> 1735

gggtcgacgg gttgacatga aactttccac cgttctgtta ttatgacacg ctccatcatt 60

gtcactactgc tagcatgac atgtagttga catcgtatct gtggcaaagc caccattcat 120
aattctttca tacatgtcac tcttgattca ttgcatatcc cggtagaccg ccggaggcat 180
tcacatagag tcatatcttg ttctaagtat cgagttgtaa ttcttgagtt gtaagtaaat 240
aaaagtgtga tgatcatcat tattattgca ttgtcccagt gaggaagga tgatggagac 300
tatgattccc ccacaagtcg ggatgagact ccggacgaaa ataaataaat aaaagaggac 360
aaagaagccc aaaaaaggcc ataaaaagag aaaggcccaa aaaaaaaaaa caaaacaaaa 420
aaaaaaaaagc gggcgct 437

<210> 1736
<211> 440
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-043-Q1-E1-F5
<400> 1736

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gccaacaggg aggcagcagc acctccatgg ccatggccag gtcaccatc aacctccgc 120
gggagaagat gagtgggtggg agtacttccc atgccccttc tgctacattg aggtggaggt 180
ccccttcttc tgtgaccacc tgcaggagga gactgcttc gacatgagga atgctgtgtg 240
ccgatctgc gccgacaacc tcggggccaa cacggccggg catttcaggg aacggcactc 300
acaacaactc aagatgagga agtcttcttc ttccagggca ggagcagcag atgacaagga 360
agcgtatgaa gatgatgact cctactatga agaatcatca tacatcatgg gcaggccagt 420
acctgatgat cattcacctg 440

<210> 1737
<211> 442
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-043-Q1-E1-F6
<400> 1737

aattcgcggg tcgacgggga catctcatct gcaattaccc accatctcct ccatatctc 60
cggcgaaacc cagccccagt ccacccacc gtccgtatcc atggcgccca aggccgagaa 120

gaagccggcg gcgaagaagc ccgcgaggga ggagcccgcg gcggagaagg ccgagaagac 180
 tcccgccggg aagaagccca aggccgagaa gcggctgccg gcggggaagt cggccgcca 240
 ggagggcggc gacaagaagg gcaagaagaa ggccaagaag agcgtggaga cgtacaagat 300
 ctacatcttc aaggtgctga agcaggtgca ccccgacatc ggcatctcct ccaaggccat 360
 gtccatcatg aactccttca tcaacgacat cttegagaag ctgcggcgcg aggccgcca 420
 gctggcgcgg tacaacaaga ag 442

<210> 1738
 <211> 439
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-F8

<400> 1738
 aattcgccgg tcgacggggg ttctaaacct tcccctctcc cacttctcca ctctctccc 60
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 tgtgaagaac cagaagacca gggcgctact caagcggttc caagtgaagt tcaagagaag 180
 gagacagggg aagaccgatt acagggccag gctcaggctc actaaccaag acaagaacaa 240
 gtacaacacg cccaagtacc ggtttgttgt gcgatttacc aacaaagatg tcaactgcca 300
 aattgtgtac gccaccatcg ctggtgatat cgtgatggct gctgcctatt cccatgagct 360
 tcctcggtat ggtcttgaag ttggccttac caactatgcc gcagcgctact gcaactggctt 420
 gcttttggcc cgtcgtgtg 439

<210> 1739
 <211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-G2

<400> 1739
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 tgggtcgaca cctgaagtta ctgattcctc ggttgctcca agcacgaaag ttgaagagtt 120
 gagctccagc cagcaggacg tattccttct tccattaaga tcacatgata actcagcaaa 180

gtagagtagat gggacataact catccatgct aggaaagctt cgtgatcagg tcctggcgag 240
gccgttgagg ccgttctcga agaacctcac agagcgcgac tggctgagga gctcggccaa 300
gatgtgggac atggtgagga gatctcccgt cgctcggac tactgcaagg cgctccagag 360
ttcaggattg ttcaggaagt agccacatgt gcgttgtaat gtcctcgatt caaccgacct 420
gagacacaat ttgaat 436

<210> 1740
<211> 391
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-G5

<400> 1740

gtaccgatcc agaattcgcg ggtcgaccgt gtggaacaat tcgctgcggt acgggatcag 60
tgagggaagc gacgtcttcc tgctgggtccc tgacaagctg cccggcgctcg agaattggctg 120
tgccgtggag gtgtgcattc gcaagggtggt ggctggtaac tagctcaagc tgtgcgccga 180
tctggaccgt cattgtcggt ctggctgcag cattgcctgc gagagtctctg ctcatatccg 240
agtaaacttg aacggcatcc gtattggtga attccttagt cgttgatggg tcttctggta 300
ctgagatgga agcataggca tctcgcgcag cgctgatgca tgaaactgtc tggatatcgt 360
cttttctgag gaggggtgaat ttggatatgc t 391

<210> 1741
<211> 430
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-G6

<400> 1741

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acgtccaggg agatccagac ctccgtccgc ctgcctctcc ccggcgagct cgccaagcac 120
gccgtctccg agggcaccaa ggccgtcacc aagttcacct cctcctagac tgatgaactg 180
atgatgcgtc cgtcgcctct agttggtctc tgtatctgca tctctgttaa ctctgcttat 240
ccctctgcaa gtagtgctgg tagtctgtgc tgggtgattg ccaacgcttc gttggctcgt 300

tctctggtgc ttgggaggac cgaagcttct gcttttgaca agctgatatc tatctagaac 360
tgaagttgtg gtggtaaaaa aaaaaaggat aagatgaaaa aaaaagcggc cgctctagag 420
gatccaagct 430

<210> 1742
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-G8

<400> 1742

attcgcggt cgacgggctc ataggggtca gtggcatcaa catgtggaag gccaccttga 60
cgtaatcggt caagcattga caggatcatc gcagcagtaa catcttcttg ttccagctct 120
tcttggtcct cctctagggg gatgtgggat tcactatcac tgtctacttc aatgttttgg 180
ggtgaagtat agcgggttctt gaaatgcttt ttgaaaagac gtgtctcttg gaagaactct 240
ccttcatatg tgtctggggt aatgtgaggt tcataatcct cttccttttg gggagatagt 300
ctagcacgtg gcgacacttc ataaacgacg tcccaacctt tcagatttgg attagtttgg 360
caggcccacg gtagatagaa tacttgggtc gcctgttgaa ccgtaatata gacatccgga 420
acatctaaat ggggtgct 437

<210> 1743
<211> 369
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-H1

<400> 1743

gggtcgacgg ggcgctagac ttaccgcagg tttagggagg ggagagagct ctagtcttct 60
cgctgctcct gaattgatcg ttcttttttc tctctctcta cccgcgccac cttgctgcat 120
cggagggtatt gctaacagag aaattagtag ccagcaagaa cgcggatcat gaacgcgaat 180
catgcgcccc gtcggtagat ttctttgatc cgtcttgttt gttcaccttg ctgtatagaa 240
agatgagaga tcagtgatcg gaaccgatgc attctgagtt agagagtatc tgttcatctg 300
cacggggtgc aaatatcagt ttctgtacca ccatggagat tactatctga aatggagtct 360

gctttttctc

369

<210> 1744
<211> 306
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-H10

<400> 1744

tccgggtcga cgggtcaatt caaatcaact cagcgggaaga tcgggaccct cgcctctatc 60
aagtggatc agaattccag gttggcccgt gagattttta agtttttccg aggttagatt 120
gaatccggtc cgcaaaacta atgtccaagt tagagccaag aaatagaata tgggtaggtc 180
aacacatctg aagtaatcca agccatgcac aatccagtac gtacacgctt tgcagaaggt 240
gctgttgcaa cgacgggttc acttgatggc cttaccatca attgcgcaac ctgaatggct 300
aatggg 306

<210> 1745
<211> 160
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-043-Q1-E1-H11

<400> 1745

cgcctgtcga tgctactcac taaagtgagt cgtattataa aggggatggg aaccgtgggc 60
tcggtaaggc ttccagatca agtggagcag gggatcgat cgcaaatgac tcaatataga 120
aaaaaaaaagc ggcccttcta aacgatacaa gcatagtttc 160

<210> 1746
<211> 404
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-043-Q1-E1-H3

<400> 1746

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ctacatgcat agacacggct ccaccagctg ctcgctgct tggcagcgct gcggcatggc 120

gaggtcggac tgcagatgac gtgagcgggc gagccttcag cttcaaggca canggatggc 180
 ggcgacacgg cggatgatggg cgagaaattg ttggccggag caggctgggtg cgcacatgcg 240
 caacgggtggc ggcggcatgt tgatgagtgc gtgtatggga gcttacttta gttttatata 300
 aggttggtca accctttttt tcctagtaca cgtaaacatt agacttaggc aacccttttt 360
 tttgaagtta gtaccacaac cacgatacgg aaatcctgtg caag 404

<210> 1747
 <211> 407
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-H5
 <400> 1747

attcgcggtt cgacgggtggc gtctgggtcc tgaactccga catctgattg cgacaatccg 60
 gtatagaaag gggaaaagag ggagaaaagc aaccgtgagt actcatccaa agtactcgca 120
 agcaaggagc tacactacat atgcatgggt atatgtgtaa agaggcatat cagtggactg 180
 aactgcagaa tgccggaata agagagggat agctagtcct gtcaaagact aagcttctgg 240
 acatctccat cttgcagcat gtagaagaga gtatattgaa gtcctccaaa tagcatcgcg 300
 tagcataatc ctaccgggta atccctcct cgtcgccctg ttagagatcg atcaccgggt 360
 tgtatctggc acttggaaacg gtgtatttta ttcaatatcc agttcta 407

<210> 1748
 <211> 428
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-043-Q1-E1-H6
 <400> 1748

attcgcggtt cgactccatc gtctcaaggt tgcacatgat ccaagccgag ggcgacaccta 60
 gccactccct cggagccctg gctgtgccag gctgccagcg gccagttgga aaaggaggaa 120
 ggcgccgcac catccctgca tgcgacgtct tggggctgga gccggcaacc gcgcgctgcg 180
 acccttggct ttctatcgag ttggtgggct ccgtgatgga gatgggggcc gatggaggcg 240
 ccgcgtgagg gtcagcagc cgcgagcttt acgatgctcc gttgtactgt agcagcgatg 300

tactagtgt atccagtga atccagcttt acgatgtgc tgcagcactg tggggacgta 360
cgacggtacg agcaatatct atttgctagg aataactgtg ctatccagtg gatgttaacc 420
ttttgcgc 428

<210> 1749
<211> 288
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-044-Q1-E1-A1
<400> 1749

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attcttcgca gtatatccgg ctgtcaatga tcggctcatc atggtctgcg cttctgcatt 120
caactagtac cctacgatat gttgctgttg taagatgtct agcctgagta ttactatggg 180
aaccttgtgg tatacatttt gtaacctgta aggcaatttc atacctgggc cattgccggg 240
tatttggtcg ccaagatgct gctggaggat ccttcgcac ttggtatg 288

<210> 1750
<211> 412
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-044-Q1-E1-A1
<400> 1750

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tgtagatgca actactacgc tacatttgga gctattccaa acaactgttc tactatatga 120
atccagttta ctattcagaa taatctagat tagtgtcaaa gtttgcacgc gcgtaaccct 180
ttacgatgaa ctctttttaca cctccataat cgagaaaatt ccttagtcca ctagtacta 240
aggataactt tgaccgctgt cttgtgatcc attcttggat cactcttgta ccccttgact 300
gactaatggc aaggcacact tcaggtgcgg tacacagcat accatactgt aaagagccca 360
tgataaaagc ataggggacg accttcgtcc ttcgtctttc ttctgccgtg gt 412

<210> 1751
<211> 308

<212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-044-Q1-E1-A2
 <400> 1751
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 tggagatcca gacctcgcgc cgctcgtca tccccgggga gctcgccaag cacaccgtct 120
 ccgatggcac caaggccgct accaatttca cctcctccta gactgacgac gtcgcttg 180
 ttgtgacaga tgtggccgct tgctgtatct gtagtcgctg ttgactctgc ttatctccat 240
 ctgcaagtag tggtagctgt agtgcgcatg ctgggtgatg attgccaacg cattgttggc 300
 tggttgga 308

<210> 1752
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-044-Q1-E1-A4
 <400> 1752
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 atgagatcct gcttgtcagc gttaatgacc cctttgtcat gaaagcatgg gcgaagacat 120
 acccagacaa caagcatgtg aagttccttg ctgatggagc ggcagcatac acaaaaagcac 180
 ttggtcttga gcttgatctt acggagaaaag gattgggtct tcgttcgagg cggtttgctc 240
 tccttgctga cgacctcaag gtcaccgctg caaacgtcga ggaaggtggc cagttcacaa 300
 tctctggtgc cgaggagatc ctcaaggcac tgtangagct tcagcgcttc ggaatcgag 360
 cgatcaccca aaccttgtgt catatcgatg ta 392

<210> 1753
 <211> 429
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-044-Q1-E1-A6
 <400> 1753

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ctatgagatg gctgtatctt ccatacaaaa tgcattatag gcagttccca aacagaatgg 120
taaaggttta tactccccca accaccaaca agcatcaatc catggcctgc tcgaaacaac 180
gagtgcctcc aacatacaac atccctgggg gagttttatt taattatatt gatttgcttt 240
gctctttttg gatcatgggc ctgggcatcc cagttaccgg tcctttctcg tgaatgagga 300
gcgagtgcca ctctagtga gaataacca cctagcatgg aagatatagg tagccctagt 360
tgtaacatga gatgctcgag catacaaat agaatttcat ttgaagggtt ggagtttgca 420
acatacaaa 429

<210> 1754
<211> 381
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-044-Q1-E1-B1
<400> 1754

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cgagcatcaa ctgtggttgt gcataattat ggttatgtca gacgtgttaa ttgtcgcaat 120
ttccaattgg tggactata tatatgtttg ccaaataatg tgtgcaccgt gtgcaactat 180
ggaacagcga agtggtaatc attttgtgag ctttgaaca gtgaagtgc acatatttgt 240
cctaaaaaaa aaaaaaaaaa ataaaaaaaa aaaaaaaaaa aaaaaaacia aaaaaaaaaa 300
ttaaaacia aaaaaaaaaa aaaaaaaaaa agcgccgcgc ctaaaggatc caagcttact 360
taccgtgca tgcgacttca a 381

<210> 1755
<211> 58
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-044-Q1-E1-B1
<400> 1755

gtaccgagtc cagaattccg ggtcgatgg gacatgtca accctgttgg catcacct 58

<210> 1756

<211> 395
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-044-Q1-E1-B2

<400> 1756

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 ccgaggccga ttcgatcgag tatgggtacc gggccccctt gggcagcata cacgtcttca 120
 tcggcaagat cggtgagcct aagcctgagc tggacatcta caccgacccc gtcgagacgg 180
 ctcagcgtgc gagatctacc caggttaaac cggccatgaa gcgtgccttc gttggagtca 240
 tctacggagg agagcgtgag gacgaatcag agcacggtaa cgagaccgtc gtctattccg 300
 gcgacgagtc ttcgaccgga gagaccgagt cgctataccg gatgcaagac gatcaggtga 360
 ggggttggtc cgatggcgac agtattccgg acccc 395

<210> 1757
 <211> 389
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-B3

<400> 1757

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 cccaaccaac caatcccca aggaacatgc gcgtaattac ttaaattttt gaggacttca 120
 aaatttttgc aataagtata tgatttcttt tgactaatgt tgagtccatg gattatacgc 180
 actctcacct ttcaatcttt gctagectca tcggtaccgt gcaatgccct ttctcacctt 240
 gagagttggt gcaaacttcg ccgatgcac caaacacat gatagcgtac actctatcac 300
 acataaacct ccttttatct tcctcaaac agccaccata ccctactatc atggcatttc 360
 catagccatt ccgagatata ttgcatgc 389

<210> 1758
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-B7

<400> 1758

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atgagccgca tctaaatagt tgcagaagct agttcaatat ttgacacctc aaaatcggct 120
tctaaatagg tctttttgcc ctccgaagtt cgtgaacaca gcttggtcca attttttagg 180
ccagtttttag aattctttga ctctcatat caactcggaa ttgagtgatt ctttttgcac 240
tggaagcctt gagtttagtag cattctttga aagaatttat cagaaaattg tctcaaactt 300
ttcaagagga aagttggaga gagagttggt gtatatcctg cttggcagtt gtttttcatc 360
attatcttca ctgccgttgt gatcttcact tatatcttgc tgtcaagagc tac 413

<210> 1759

<211> 387

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-B8

<400> 1759

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actctgaagg gcagcgaggt gtgcacggtt tcgccgagcg tgggcgagtg gagccccgag 120
ctggtgaacc ctacgtggt ccgcgcgatg aaaggtcgca tcgaatggcc ccagggcgcg 180
aagaagcaga gcctgaagtc aaagcctctg gattcgagat tcgacggctg caagggtccag 240
ctgcgccaag cattgaagca gaagatatag gatggcccggt ccacacgctg tatccaattt 300
ctgaatatag gaccatcttg ccttgaagg gtgcctggtc tgtaagacga actgacgtgt 360
agtaacattg gtccctgaca tgggtgc 387

<210> 1760

<211> 405

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-C1

<400> 1760

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ctgaccttct tcctctcgca gcacacgagg ggagcaggat acagagcggc atctcctcca 120

cgccggtggt cgacacaaac cgaactaccc cagtctcctc ctcaacaccg ctgtttcgcc 180
ctcaatttcc atcggcctct tctacatcgg cgtcagctct ctccgacctt cctcgtcaac 240
tctctctgac cttccccgca cctttcctct gctgccgcgc atggtgcttc gtggcatccc 300
aagtgcctct ccaaaacagt cgtgtgtagt gctcccctga aatcctcatg tgtggaaagc 360
tatggcatcc agctactacg gctgtttcta attaacaatt ttcct 405

<210> 1761
<211> 368
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-C3

<400> 1761

acgggcaagt aaaataccga tgacaaaggg aacaacgtat gttgttatgc ggtttgaccg 60
ataaagatct tcgtagaata tgtgggaacc aatatgagca tctacgttcc actattgggt 120
attgaccgga gatgtgtctc ggtcatgtct acatagttct cgaacccgca cgggccgcac 180
gcttaaagtt cgatgacgat ttatattatg agtttatgtg ttttgatgta ccgaatgtag 240
ttcggagtcc cggatgagat cggggacatg atgaggagtc tcaaaatggt tgagacgtaa 300
agatcgatat attgaacgac tatatttaga catcagaaag gttccgagtg attcaggtat 360
tttcggag 368

<210> 1762
<211> 401
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-C5

<400> 1762

taccgatcaa gaattcccgg gtcgacaaa catcctcgga cgacctccc gacgccgact 60
tagaaagctc caaagcaacc ccgagcggca tcatcaaac cgatgaaggc cctgccgaag 120
atgatgatgg agattcccac catttctggg taatggcata actcgtgttt cctcatttaa 180
catggatata ctcttggtg actcgttcac tgaccgacta atttgtgaaa tcgtagtgct 240
tctacttctg agacctcagc cagacatgaa gatcaagaaa tggaggatgc tgccacttgc 300

aaccctggta tgatctaaat agtttcgctt tcggtcgata ggatcctcat ttttaacttt 360
gaatcttttc tgtagctcca cctagtatca tcattgatct c 401

<210> 1763
<211> 399
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-C6

<400> 1763

aattcccggtg tcgacgggtt tgtcacttcg gtggaagggtg aggcgggctt gttttcttct 60
tcagccctta catgcgtctt cagccatctc tatctccgag acgccggctt cgacttctcc 120
tctgtcctca ctcccgtgga ctctgactct gagggcgatg ctgctgccgc cgtgaagagc 180
tccatggacg ccatgatgag caggttcctg gtcgtcagtc ctccgatcgg gaccgagggg 240
acgggcgacg cgcctggcga tggggctccg ctggcgggtg atggcggcac ccaggctctga 300
agagggtggct tcgtaacgat gcaccttcat gtttgcctg tatcatgtag catgcctcac 360
agaggcattt aaaattgttt gcttgaaca atatgtttt 399

<210> 1764
<211> 412
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-C7

<400> 1764

aggtaccgga tctagaattc gcgggtcgac gggcagcgga cgctcgcttg gcaaagctac 60
tggttccagc accctatgtg gtgccagaaa agaaggccaa gaagaaggcc tcggggactc 120
agaagagtgc ccagcgctta ggggtgtcgg attcatcatc cggtgactcc aagacgtact 180
cctcccgtga agacgaggag gaggaagaag agacctctcc ccctccagcg gggggagaga 240
ggaaaaggaa ggccgccccca cctagggagg ccgaagggtc caagaagggg aaaacccttc 300
ctccggacgg ctccaccaac gccgacgacg gcgaagagga ttggccgcac atggccaagc 360
ccctagcgag atcgtaagtg tctggatacc agaatgattc atagtattct tc 412

<210> 1765
 <211> 403
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-044-Q1-E1-C8

 <400> 1765

 attccccgggc cgacctaggg actagctgcc ttgtactatg aaatgcttcc tgcagccgga 60
 caaataatga gttgcagctc gcagagcgac tggtcggctc gcaggagtta aggctgaagg 120
 gatgtctgcc taaaaaatgg ctaaggaccc aaggcgtaca catagtccaa gtcggcttcc 180
 cgcctcaccg accaactgtc aagcagccga ccagccggcc cctacttaac ttgctagaaa 240
 actccaatcg gctaagtact ttccttccca aaagtggcta agtacttgac ccagccacag 300
 tccgtggaat ggctgctcgg ctggcaaggt ggcaaccgag ggaaggcggc aaaggaaaaa 360
 agccaaagag cagaagcaag gaaagatatt acttggcaaa aat 403

<210> 1766
 <211> 394
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-044-Q1-E1-C9

 <400> 1766

 gggtcgacgg gaggtagagg cgaaagtgag gctgggtcatg gagtccgagc atgggaagca 60
 gatcagggag aggatggcga tagcgaaagt gattgcagcc gatgcgctgg agaccggtgg 120
 gtcctcagcg gcagcatttg ttgacttcct ggatgatctc aagatttcca tgctagatgt 180
 tatttaacct ttagtggttcg ccttggttcag cttgggtggaa tttgttttct aaatgtttaa 240
 aaacatccgg ctgattacag cgcgggtgtaa acctcctcca atgcgcgcca cgctccagt 300
 acagagccac caccgctttt gcttttctact tagagcatgg gtaataatat gctcccctcg 360
 tggttaaata gactcgactc aaccttgtac taac 394

<210> 1767
 <211> 440
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-044-Q1-E1-D12

<400> 1767

gggtcgacgg gccagagagg catatatctc accaagatgg atcgtaaaac ggaccaagaa 60
taatccacct tggctgtaca acctctctct tgttggtggt caaagtgatg gccgtccatg 120
cgaccccgaa gatgggctag ctgcgaata atcacgcaag tagctagtgc ccgaagacaa 180
ccactgcatg cgcgtggccc aaacatatgt atggagaggt gtggttttga gtaacaatgg 240
aacaactttg atgtggcacc gtgatttcaa actagaaatc cccacagaga gtgagggtta 300
ggtgacgatg catatgtatg ttacaccaca cttcaagcca acgacgggga ttcatatatg 360
catgcatgcg tgcatagtat atgcgatcaa acttaattag gtctgaatct caccatgacc 420
tatactacgg taacacgaac 440

<210> 1768

<211> 401

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-044-Q1-E1-D2

<400> 1768

ccggtcaaga attcncgggc cgacgggggc gccaaaacgc gcagcacgcg cgcctcgcat 60
gcggtggacg tcctcgtcc actcccgtt tgtccacgcc gtggagcttc tcggcggcca 120
cgagagggcg acgcaaagt cagttcttga actcatggat gtgaaggatc tcaccctagc 180
tcatgtgaaa tctcacttgc agatgtacag gactgtgaag aataccgaaa ggccggcagc 240
ttcgtcaggt tgatggcttc gagaacgggt cggctggcga gatctgacgac gacaacttgc 300
ttgacctgcg aggcggcggt aagcccagg cagtggcacc ggccacacgg aatggaacgt 360
tanctgcaaa cgacgatgac aggagcatcg gcgccggtgc c 401

<210> 1769

<211> 414

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-D4

<400> 1769

accggtccta gattccccggg tcgacgggag agccaacccg cgagctacaa cccctgggag 60
 accaccggtg ccgccccggc cccgatgatg caacagccag cagcaatgca ggaccggttc 120
 tacgggtcaa acgggtatgc ggcgccccat gcggtgcaga tggccgcat ggcccagcag 180
 cagcaggctt tcatgttca gcagcagatg atgatggcca gccaccaccc tcaggcacia 240
 caataccacc aggcacaggc ggccccagcg aaccattcg gcgcgaaccc gtttgcgccc 300
 gccggcgccc aacaccctta tggcgggcgt ggcaccggga tgatgcccct ccacgcgctc 360
 cacggcaatg cgtacaccgg gctgatctaa ccggtggttc acagatgaaa actt 414

<210> 1770
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-044-Q1-E1-D8
 <400> 1770

aattcgcggg tcgacgggga caggactcca agggccaagc ccctggcgag atcgtaagta 60
 tccggactcc cgaataactt catgggtttt ctttgcgcca cataatgtct ttctaattgc 120
 gcatgtaacc ctgcagtccg cccaaggatg atcttctgc ttcgtcgagc gggctccttag 180
 gtgcgtcgga catggattcc ttttcgactg cctccactcc tcgtgatgag gacgatgctg 240
 aggtgggatc ccgggaaggg acccaccagg aggaggaggc cccggagggtg tcgcaggaca 300
 acctcccgga ctttgcaccg gactcgccc cgagaccta agtggctctg gaatccggcg 360
 ggcgaccctc tcgtaagaag ggcaagaccg tgacgtggc agcctccgtt c 411

<210> 1771
 <211> 396
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-044-Q1-E1-E1
 <400> 1771

ccggtccaga attccccggg cgacgggaag acgcagcagt ggatgcccac gcggagagga 60
 gtacgagggt tcaactggtc ggctgtggtg tgaggctgcc gtcgccgag ggccctggcta 120
 gcggtgggag tagtangggg cggtgaggcc tccgcggcag cccagcaggc cacgggaagc 180

acgagtangc gacatgaccg acgctgcttc gggcggctgg agcaagaaga ccagagggttg 240
aagaaacact acggcccgtt ggatggacat cataccgtca ctggagctag aatcgtttat 300
actgactaag ttgacacagc cctccgtccc cgtcaactta gtacgcccac aggtcagcct 360
cccactatgc gggccccagc tagcaggggg agtatt 396

<210> 1772
<211> 442
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-E12

<400> 1772

gtacgggtccg agaattcacg ggtcgacgag gaagaatatt tggaagatga agaagatgac 60
gaatttctga aaggtttcaa ggttgcaac ttcgagtaca tagatgaagc taaagcttta 120
gcagcaaaag aggaggcacg caaaaaagcg gaagctgaag ccgcatccaa taaagcaaac 180
tattgggaag aattattgaa agacagatgc attgagcaag aagtagaaga aattgctatg 240
ggaaaaggaa aaagaagccg caagcagatg gctgctgctg atgaggatga cattactggc 300
ctgcacgagt taagttctga agacgaggat tactcctatg atgatgatgt gtcggataat 360
gacacgagtt taccagcaaa tgtttctggg aggaaggctc agtattctaa gaaaaactca 420
cgtaatgtag attcactccc tt 442

<210> 1773
<211> 414
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-E2

<400> 1773

ccggtccagc attccgggtc gacgatcaag gcaacatact actccctgaa gacatttgctc 60
tgtcgtcttc aggcgaggtt gaagacctgg agaagcttat cgaccacgtg ttcccagctc 120
tagatgacaa catgtccaat tcaaattaca tgacatctcg agcaatcctt tccactacaa 180
aggaacaatg ttgacaagat aaacatccgc atgatagagc gttttcatgg tgatgaagta 240
atctaccata gctttgacaa tgcggaggac gaccgctatg gctactacgc tcaggagttt 300

ctgaatggat tgaatcctaa cgggtcttcct ccacatgcac tcaagctaaa gttgaactgc 360
cctgtcatatc tgctaaggaa cattgatcca gctaattggat tgtgtaacag cact 414

<210> 1774
<211> 396
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-044-Q1-E1-E4

<400> 1774

acggtcaaaa ttcccggggtc gacgggaaat gcaaaaagct ggcaaataaa ttaaataacc 60
aagctcactc aagaaaaaca aatcgatttg cgcacggaga aggactgctc attacatatc 120
ttacacgcgg gcggtaatta tacaatacat cactcagata tgcgtacata atcctgacat 180
gtcatttagg ctagtgcact tctcccagtt cctacatgat gcgcaaacag gctacttctc 240
acaacctatg tacatataaa catatcgtag aaagcggtag attgcatggc ggctaagcgt 300
actcaggcgg agatgttgac gatctccttt gccttgccga gggtagggcg tancgaggct 360
ggggactcga ctctctcctt gctaattaggc tccata 396

<210> 1775
<211> 411
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-E5

<400> 1775

aattcgcggtc tcgactagaa aaattgatcg gtcgaagact ccatgatatc cgctccagct 60
tcatcaacat agtcatcatc gccatcgtag gggtagcagc cggtgtcgtc gatgatgatg 120
tagttctccg ggcaagtgga accgtcatct cctcctctgg gcgcgggggtc tcccatgaac 180
actcctagct tccttgtagc gtcgtcattc ttctccacta atacgacgct ttctcctca 240
taatctttgc gtgcaacctt gagttcttcc tccagttccg tgatccttgt catcgccctc 300
ttcaaactcg tcatgcctgc gcacatctgg ttctcctggc gtcgaatgtg ctagtttaac 360
tcctggatga aagctgcaat cgatctatcc ttctgggtgc tgatcatctc c 411

<210> 1776
 <211> 420
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-E7

<400> 1776

gtaccggact agaattcgcg ggtcgacggg catgacaaca tgatctccat catcttgatc 60
 tatatcaatg tttcgtcaca tggctgtctc gccaaactatt gctcttgcaa ctattgctat 120
 cgcatagcga taaactaaag caattatctg gcgcttgcat cttatgcaat aaagagacaa 180
 ccataaggct tctaccagtt gctgataact tcaacaaaac atgatcatct catacaacaa 240
 cttatatctc atcacgtatt gaccatatca catcacaaca agccctgcaa aaacaagtta 300
 gacgtcctct actttgttgt tgcaagtttt acgtggctgc tacgggttga gcaagaaccg 360
 ttcttaccta tgcatacaaa ccataacgat atttcgtcaa gttagtgatg ttttaaccct 420

<210> 1777
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-044-Q1-E1-F1

<400> 1777

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 taaagttatg ctagttgagt agttgtgaat ttgagaaata cttgtgttga agtttgcaaa 120
 tcccgtagca tgcaggtatg gtaaagcttg tgtaacaaat ttgaaacatg aggtgttctc 180
 tgattgtcct ccttatgagt ggcggtcggg gacgagcgat ggtcttttcc taccaatcta 240
 cccccctagg agcatgcgcg tagttcttgg tttttgatga cttgtagatt tttgcaataa 300
 gtagtgtagt tctttatgac aaatgctgag tccatggatt atacgcactc tcacccttcc 360
 atcattgcta gcctcttcgg tactgtgcat tgcnccttct cac 403

<210> 1778
 <211> 247
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-F11

<400> 1778

gggtcgacgg ggaagtccgc cgccaaggag ggcggcgaca agaagggcaa gaagaaggcc 60
aagaagagcg tggagacgta caagatctac atcttcaagg tgctgaagca tgttcacccc 120
gacatcggca tctcctccaa aggcattgtcc atcatgaact ccttcatcaa ccaaattcttc 180
gagaagctct ccggcgaagc cgccaagctg gagcggtaaa acaagaatcc caacaatcag 240
ttcccgg 247

<210> 1779

<211> 226

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-F2

<400> 1779

cgggtccagaa ttcccgggtc gacgggggta ggaagaagtg ggggtggtggt gtcattgggct 60
ccaagtgcga agcgacgacc aaggccaggg aaaggcttat cgcaaaggac gctgcgagc 120
ggatgaacta agtttagcat tgttgaacca tatctattcc tcatccttga gtagtggtca 180
agcatactgt ggctgtttgg ctccagtttt gggaatcaat tttggt 226

<210> 1780

<211> 319

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-F3

<400> 1780

accggtccag cattcccggg tcgacgggga tagtaataaa tgacctgcag tacgtggtgc 60
agctggatga cagcaccctg atcgagcact atgccatcta caacttgggtg cgcacggctc 120
ccatggccag ctacatgcat ggggtgggaca cgctcgtgac cacctagctc gacaagcgtg 180
aacatccggc cgcacctcgg ctgcgtcaag aacactttcc tccacgcgct caagatgctg 240
ccgcacggca tggacaatta gtacagctcc ctttagttca ccctcgtcgc gatcatcgtg 300
ggagcttgag agctgctgg 319

<211> 316
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-G3

<400> 1783

cggtccagaa ttccccgggtc gacgggcgta cgaacatgcg aaagctatgg tccaatagcc 60
 acaatacgcc agggaaaagt tggtaaaata aaaaagttta taaccaacca aaacgaacca 120
 aaataaaatt aaaattaaaa ttccgcccga tccttttcgg caattcaagg gtaacaaggg 180
 aaacggcaaa ttccgggggcc ccccaaaaaa aaggccgctt ggggatcaaa aacttctcaa 240
 atagcagcta gctaaattga gtccttcatg tttcaciaac aaaggaaaat tcaatttcga 300
 gacatgtgct taaaca 316

<210> 1784
 <211> 425
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-G5

<400> 1784

aggtaccgga ctagaattcc cgggtcgacg ggttgccta agcttggggg tgctatgatt 60
 aatgaagata atcttggttag taccggtact tttaatgaac aaatttggtta tgatgacatc 120
 atgcctccta tttatgatga tcacaatgat gaaagtgggt ttcgaagagt ataaaatcta 180
 ggtattaatg atcccactaa tttggagggt gttgaatctt attacaataa tgacaaaagt 240
 ggatttgagg aggtcttgac tttatacagt gatgaatcca ctactttgga agagggtttca 300
 attgattatg acaacaaagt tgctatctat gatgattatg gtaatgatat gtatgctata 360
 aagagtaata ataaccatga aacttgtcac catgatttta atgttcaatt tggttatgtc 420
 aatca 425

<210> 1785
 <211> 452
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-G6

<400> 1785

aattcccggg tcgacgggca tgcccaaaga aagttatccc tataaaatca tatagtctgg 60

ctatgctcta tcttcaccac acaaagtatt taaatcatgc acaaccccga tgacaagcca 120

agcaattggt tcatactttt gacgttctca aactttttca atcttcacgc aatacatgag 180

cgtgagccat ggacatagca ctatatgtgg aatagaatgg tggttgtgga gaagacaaaa 240

agggagaaga tagtctcaca tcaactaggc gtaccaacgg gctatggaga tgcccatcaa 300

tagatatcaa tgtgagttag tagattgcca tgcaacggat gcactagagc tataagtata 360

tgaaagctcc acaaaagaaa ctaagtgggt gtggatccaa ctcgcttgct caagaagaac 420

taagggaatt ttgaggaagc ccatcattgg aa 452

<210> 1786

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-044-Q1-E1-G8

<400> 1786

agaattcgcg ggtcgacggg cactacaggg tctggggcag cacgaaggac tccctggtcg 60

aactcgctc ggccatcatc gaccctact acgaaaagat gaagcaggat gccagagaa 120

caagtccct atcctggcac agggcctgga tgtggcaact ggatgaacc acctcagggt 180

cgaggccaag tgcgtgtaca catgctacga ggtgcacagg cagatcgttg acatgaggaa 240

gtgcctcgta accaaaatcg atgagcccag atcaagccac aagcagagca agcgtcacaa 300

gaagtagatg atgatcagat gatcgtttat gctagttaat catgcatgta atatatagtt 360

tactttattg gtgtgttgaa atgtcatgtg tgtagtatcc acct 404

<210> 1787

<211> 363

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-044-Q1-E1-G9

<400> 1787

cgggtcgacg ggtctaacaa gctttgaggt aagaatttta atatttataa aatagtaccg 60

catagacagt agcccctgat gcttggttcg gtgtttggaa agaaaagccg gactgaggat 120
ctaaaaagat atacgcagga gtcttaaana aatatttcaa tatgggattg caagcttccc 180
tgctgaactt caacggccct aactgcgaag gcaattgctt tgaaccaaac cctcaagcgg 240
tccgaaaaca acccctccgt tgcaaaaaac aacttcaagg acaaggaagg taattaaaac 300
cttattaaat ttgtacctta caaaaaagga tttggttgca aaaggaatga caaggataac 360
ttg 363

<210> 1788
<211> 390
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-044-Q1-E1-H1
<400> 1788

ccggtccagc attcncgggt cgacggggat atggaacagt gatccagatg cctcccaaaa 60
tgtagccgtg tgcatgagc cacacactaa attctttcgc acatgtggta tcggtgatta 120
agcgtttcta atgacgtagt gaaaccatac ggtttgttgt tacgaaccgt ttaggaaata 180
gtatgtaagg cacacgggcc aacatatgaa ctgtgtgcga tttgtgcccg atcgcacaca 240
agttttctat gtaaccgcc tgccatgcta gactccatcg cacacgtttt ccaacaatta 300
ccgtccgca taatgttcta tcaaaaatgg ttcaggagcc ctttcgcaca catacaagtg 360
ttgcagaccg aaaaaaaca cagaagaacc 390

<210> 1789
<211> 299
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-044-Q1-E1-H3
<400> 1789

cggtccagca ttcccgggtc gacgngtca ngaagnaatg gggcgggtgt gtcattgggt 60
ccaagtcgca agccaagaca aaggcaagga aaaggtcaac ccaaaggagg ttcccaaaag 120
gatgaactaa gccaacctt aaatttcaaa acatatcaa tgtattttcc ctttcagtgt 180

gtcctaattt tgacaaggaa ctcaaaccct tttaccacaa ctgtggaacc taattgtggt 240
 tttctgattc tctgttccgt togcaagact atatcaaaga taagatgagg tttaccgg 299

<210> 1790
 <211> 416
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-044-Q1-E1-H5
 <400> 1790

gtaccggatc agaattcccg ggtcgacggg gggggggggc gccacctccc cttggcctgc 60
 ctctctcttt cccgtatggt ctaataaggc ccattacttc tctcagtga ttcccgtaac 120
 tccccggtag tccgaaaaat acccaaatca ctcggaacct ttccaatgtc cgaatatagc 180
 cttccaatat atcaatcttt atgtctcgac catttcagga ctctctgtca tgtccgtgat 240
 ctcatctggg actccgaaca aacttcgggc atcaaaaaca taactcataa taaaaatcat 300
 cattgaacgt taagcgtgcg gaccctacgg gtttgagaac tatgcaaaca tgatcgagac 360
 acatctccga tcaataacca atagcggaac ctagatgctc atattggctc ctacat 416

<210> 1791
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-044-Q1-E1-H9
 <400> 1791

cgggtcgacg ggagatggtg atattagagt catgctagtg ggtagttgtg gattagtata 60
 aatacttgtg ttgaggattg tgtttcccg agcatgcacg tatggtgaac cgttatgtaa 120
 caaagtcgga gcatgaggta tttaatgatt gtctactta tgggtggcgg tcggggacga 180
 acgatgggat tttctacca atctatcccc ttaagggcat gcctagtagt acctttgctt 240
 caagggcaaa taaacttttc aataagtatg tgagttcctt atgactaatg tttactccac 300
 gggttataag caatcccacc cttccatcat tgctaacctc tctagtaccg cacaactttc 360
 accggtacca taaaccacc atataccttc ctcaaacag ccaccatacc tacctatcat 420
 ggcatt 426

<210> 1792
 <211> 329
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-A1

<400> 1792

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 cgaggcccaa tgggcgagaa tctcttcgag gagatcttca acatgcatga ggatcgaacc 180
 cagaagggaa gagattcaac acagtgactc gcattgacgc cacaagtga tacttgctta 240
 tgtacacgta catacaaagt ccaaccgctg tcaaactatc gcatatgggt aactcattca 300
 ccatcgtttt acatcctaca cagagtcag 329

<210> 1793
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-A12

<400> 1793

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 cttatatatt acagtttgac cagtagaaaa gagacattgt tatctctatg gggtgggggtg 120
 gcactctatc cattccactg attagcaagt tgagcgtcag acatatgggt tggctttttac 180
 ggatgggtga tgatgtcaga caagccatta tcttggggcc gaataaggta ttttaagttca 240
 acgagagcga cgttgagaag atatacgga tcccggcagc tggaacagat gtgatggaca 300
 aaacccatga ataatggtta tatacgcgta caaagaaccg attaatggta tatgaatcca 360
 gaaactcatt atattaccta tcatgtttgc aagcacctg 399

<210> 1794
 <211> 440
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-045-Q1-E1-A2

<400> 1794

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ggctgaaagc tcgggacgag gtgggaagag gggccgagc agaccccgga agtcttagac 120
ctctccggcg agcctttttg gtgaaatcag gtcaagcgat atctaaccac tgatatgatg 180
tgatccagcc cggccattcg acagtactct ctgactgcct gctattcgag agattttttc 240
cgtgtagtgg taatcttgtg attgtgagcc tgtaatgtta gcatgcgcaa ccgtattatt 300
cattggtgac cgtgagtga tttttctgct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 360
aaaaaaaaaa aaaaaaaaaa aaanaaaaaa agaaaaaaaa aaaaaaaaaa aaaaaaaaaa 420
aagggggcgc cccaaagggg 440

<210> 1795

<211> 392

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-A6

<400> 1795

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atcgagggga agcaaggaag tacctaagct acacatgacg ctaggaccga acacgggatg 120
accaactctg actccattgg gaccgggaga atgcacatac tccctctgtt taaaaatata 180
aatgtttttg aatatttcaa tatagactat acatggatga aatgagtga tcaaagacac 240
caaaacatgt ctatatacat ttaattcaga aaaaatctag aagatcttat atttgtgaat 300
ggagggagta ctatcgtgtg ccttccttaa gtagagggtg cacgtgaatc cctttcctcc 360
tcaagatttt tgttcacctc gtgacctca tg 392

<210> 1796

<211> 394

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-A8

<400> 1796

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ctttcagttt gcttctgtgg cgtgtgaagg cttgtgccac cgcagcaatt aaccaaggaa 120
aggaaggaaa ttggatccccg agaattgctgt agactgatct atgggttaat tagagattcc 180
aaacggagct gctgatgttt gaaggattga tttgattcat catgcctgca ccggaggaga 240
tcaagatcca cgcacaaaac atcgatgctg cagcaagaga gataattggc attttgagg 300
atacaagcat aggaaatgtg atcttcgtcc gtggttggcg tggatttggg gcacagcgg 360
cactcaaggc agtagcacia cgcctgaaat catc 394

<210> 1797
<211> 416
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-B10
<400> 1797

ttccccgggtc gacggggggtc cgtatacgac cccgttctcg ggatctgctg ccatttctgc 60
aggcagaaga aactctgcgg cgaggagggc tgcaagcgt gtggggaagg agactttgag 120
cagcaatgca tagggaagac ggagtgtcc tcttgccatt cctcctatgg gatcctctgc 180
cgtgcttgcc ttaaagttag gtacggtgaa gagatggaag aggtcaggaa gaacaagaag 240
tgatgtgcc ctactgtgt tgaggagaag ggtaccaaga aattctggat atgcaacagc 300
tccatctgct tgaagaagag gaagatagca ccaaccggga tcgcatatt ccaagcgcgt 360
gagcaaggat atgcgtcggc cgcacacctt ctcatggacc agctgaagag ccgcgg 416

<210> 1798
<211> 418
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-B11
<400> 1798

gacgggggaaa cgaaagaaca aaagagcttg cgcaagaaca cgtaacctt gcggtcaaag 60
ccatcgaatc tctcccaggc agtgacgatg aagatgttct gatttcaagg cgcgctctta 120
ttgatatcac acagagagtc atcacaagga caaaatagca tgattatata cagggtggag 180

aagataaggc ggagtttcae cacagggtga gtgttccgct tggaaatddd tggcgcctt 240
 ggtcattgca ttctttccat tgcccgggtt ttgtgtaaca tttgatgaga cttcagggtg 300
 accattcctg ggaatcatcc taagtcgcag ctgtagtggt tttagttact ggtggcagca 360
 gaatctgtgt attaatatca cgattggcga ttgcacgatg acctgatcat aagactgt 418

<210> 1799
 <211> 414
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-045-Q1-E1-B7
 <400> 1799

attccccgggt cgacgggata tctatcggag tagtttgta tttgctctag tgcttcactt 60
 atatctttta gagcatgggtg gtagttttat tttgaagaaa tagatgaact ctcatgcttc 120
 acttagatta ttttgagagt cttaatagca tggtaatttg cttaaaatcc taatatgcta 180
 ggtattcaag aataacaaaa ctttcttatg agtggtgtga atactaagag aagtttgatg 240
 cttgatgatt gttttgagat atgggggtaa taatatcaaa gtcgtgctag ttgattagt 300
 tgaaattgag aaatgcttgt gctgaagttt gcaagtcccg tagcatgcac atatgataaa 360
 tgttgtgtaa caaatttgaa acatgagggtg ttatttgatt gtcctcctta tgag 414

<210> 1800
 <211> 340
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-045-Q1-E1-B8
 <400> 1800

gacgggctag tggatacaga aagttgcaac ggtggaatta ggtttttggc tcctgttctg 60
 atcgtttggg ggtacgtgtg tatatctagg aggaagaagt acgccggacg agcaacaagg 120
 ggcccacgac gcaggggggc tctcaatttg cttgggatcc taatatgcta tgtattcaac 180
 aataacacca ctttcctatg actgtgtcga atacatctag aactttgata cttgatgatt 240
 gttttgaaat attgcggtaa taatatcaat gtcatgctcc ttgattactg tgaacttaat 300
 aaatgcttgt gctgaaattt gcaagtcccg taccattcac 340

<210> 1801
 <211> 298
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-B9

<400> 1801

cggggatatg gatggtgact tccccggtgg cgaatccgaa atctccgaag cgagcgattc 60
 taataatcgc aacgctattg acaccacttc gaatcacaga tgtgattggt gatgagaatg 120
 gcgaggataa taaagagtat gcagacgac aggccgctgc atcaggtgac aacaattata 180
 actatcacca cagtcactat gattctgggg actactacta tcattactat catctctctg 240
 ctgtcgacga tagacatcga gtcttatagg aggatgatta ctatgaggat gacgacga 298

<210> 1802
 <211> 402
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-045-Q1-E1-C1

<400> 1802

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 ccaaggagggg cggcgccgac aagaagaaga agaaggccaa gaagagcgtg gagacgtaca 120
 agatctacat cttcaagggtg ctgaagcagg tgcacccgga catcggcatc tcctccaagg 180
 ccatgtccat catgaactcc ttcacaaacg acatcttcga gaagctggcc ggcgagtcgg 240
 ccaagctggc gcgctacaac aagaagccca ccatcacgac ncgcgagatc tagacctcgg 300
 tccgctcgt cctccccggc gagctcgcca agcacgccgt ctccgagggc accaaggccg 360
 tcaccaagtt cacctccgcc tgattcggtc ctgtccctgt gt 402

<210> 1803
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-C10

<400> 1803

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acgtcttctt gtgtgggttaa atatgtgcac gtgtactcta taccgaggag cattttcgca 120
caggatcttc cttgcgtgag gtacagaagg tggccaagca caagacgacg cgaagcactc 180
gttaaaaaga aaggaaaaac gagctgggtt ccgcacctga ctgctctagg ttcgttcgga 240
gctagcggtc agatccgtca cgatggatgt acagaacctg catcgacgag ccgactgggtg 300
tcagggtgagg ttgaaacagc ctgtaacgtg gttagtacct cgaggaaccg gcgcgtgtgc 360
ttttcgaaag aagtggaacc tgtggtagac gtgac 396

<210> 1804
<211> 425
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-C11
<400> 1804

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aggggactga ttgggaaagt ggatactacc cacttactct ccatttcagt gaggactacc 120
ctagcaaacc tccaagtgc aagttcccgc agggtttttt ccacccaaat gtctatcctt 180
cagggacggt ctgcctctcg attcttaatg aggatagtgg ttggagacct gccatcactg 240
ttaagcagat tctagttgga atacaggatt tgcttgatca acctaacca gctgatcctg 300
cccagactga tggttatcac ctctttatcc aggatccagc agagtacaag agacgcattc 360
ggctgcaggc caagcagtac cctgctctgg tttgaggatt catgtaacag tctaaaatca 420
taaat 425

<210> 1805
<211> 228
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-C2
<400> 1805

ggtccagaat acccgggtcg acctcatctc ccacggctgc ggtggctgcc gcgctcacga 60
tcacaacatt gcgcaatata cggatcgga tccggacgtg ctgttcctgc aagtcagcta 120

caataagcag aggtccatgt gctacagcct cgatgtccat gtcgtcgcac gcgacaggct 180
ctacacggga gctcatggca gggtcagcag cttcagctgc accaatgc 228

<210> 1806
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-C6

<400> 1806

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agcttgcaa catggagcag ataaggcagg acagatcgta tgtacgttga cgaaagcgtc 120
ggatacagcc ctaatgacac atacagagac tgataaagag acaccgagag aggaagaagt 180
taggtctgtg acatagatgg agacatgtaa tatacttgag atacgtttgc atcggtattc 240
tgttcacatc gacggagaag acacaccagg ttgatcaca tagctcgaca cgcattgacg 300
agaggggaag gatctcgtgg gttgagggat tgataatttt gtgcgggtga tagagggata 360
ggtaattctg tgcaagagac agatgaggga ggagtcagtc agctgtcgtc ccac 415

<210> 1807
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-C7

<400> 1807

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atgccatttc taagaagagc accagctgtg acgctactgc tcaccgtcag aagatgggtc 120
gatgcagaag ttggaagggt ggatgagagg ctttaattac tttgcaactc tgcctcatga 180
gtccatcag cccaacaagt cggttcctgc ctttcatcgc tcgcttttagc agcgaccctg 240
cttgatggcc agacctcatg cggcagcagg gcagggcagc acgggttctc ggtagattgt 300
gatcgagggc ctagcacgaa gattcccagt cgccggtggt tgtaaagggc aaaaccctg 360
gagcagattt tgtcaatgga caagtggaga ctgctatgct agttcatggg aaaatacaga 420
atga 424

<210> 1808
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-C8

<400> 1808

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 agtacacgct cggctacaag accgtcctca ggaccctcag gaactccaag gcaaagcttg 120
 tgatccttgc taacaactgc cctccgctcc gcaagcttga gattgagtac tatgctatgt 180
 tggcgacgat cactgtccac cactaccatg gaaacaatgt tgatttggga actgcgtgtg 240
 gtaaatactt ccgagtctgc tgctgagta tcatcgaccc tggcgattcc gacatcatca 300
 acgcaacacc agctggccag taaacctgtg tatgccattt tcagtgtctc gtctgatgag 360
 tcatctaagg tggttctaga gtgtagttcc tgctggactt g 401

<210> 1809
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-C9

<400> 1809

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 gccggcgagg aggcgaagca gcggggcagg aagaaggga gcaaggcgaa gaagagcgtg 120
 gagacgtaca agatctgcat cttcaagggt ttgaagcagg tgcacccgga cgtgggcatc 180
 tctccaagg ccatgtccat catgaactcc ttcacaaacg acatcttcga gaagctcgcc 240
 ggggagtcgg ccaagctggc ccgctacaac aagaagccca ccatcacgtc ccgggagatc 300
 cagacctccg tccgctcgt cctccccggg gagctcgcca agcacgccgt ctccgagggc 360
 accaaggccg tcaccaagtt cacctcctcc tagacaac 398

<210> 1810
 <211> 438
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-D11

<400> 1810

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tttgggttaa atccttcgaa gaaccacttt attagacgcc tgaccctcgc tccattgtat 120
gggcatcggc atggttctgt ctgccgtggt catgctcagt gccgagagct gtacatcgcc 180
gctagcggcg cctccatgtc catggagcat cgtgtcactg ctattggtgt tctagctagt 240
gccacaagct gcggcgttgt gcctctcgga aggcgttcaa tcagctgagc cagatggcgt 300
tccgatacaa attgttcattg tagaacatgc ccagcattgc cagctcgcta ctgttctgtg 360
gccaggcgct atcaaaacta ccaaagcagg ctctgtgca cttgaggagg gtcagggtga 420
ccaaaccggc ttggttta 438

<210> 1811

<211> 410

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-D4

<400> 1811

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tcaggacaac cagtcgcaga tgagcatgaa tgctccaga ttataaagaa tgatgacctc 120
gaagagctcc aagaactcgg ttctggaact ttggaactg tatatcatgg taaatggagg 180
ggctctgatg ttgcaataaa aagaatcaat gacagatgtt ttgctgggaa gccatctgag 240
caagaaaaaa tgcggaatga cttctggaat gaagcatcta accttgctga tctgcaccac 300
cccaatgttg tggcctttta cggcgttggt ctagatgggc ctgggggatc cattgcaacg 360
gttacagaat atatggttaa tggctcactt aggacggctt tgctgaagaa 410

<210> 1812

<211> 406

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-D7

<400> 1812

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atccacatat tatgcgcact tagatcctta tatgcaaacc atattcaacc tgacagctaa 120
tgctgtcaaa ggagatgagg aaccagttgc actgcaggct gttgagttct ggagtactat 180
ttgtgaggaa gagattgaac tccaagagga atatgagga tctgatgatg ctaactcaac 240
tgtaaattat cgcttcattg agaaggccct cccttcaçtt gttccaatgc tgctagaaac 300
tctgttgaag caagaggaag atcaagagca agatgataat gcttggaaaca tttccatgag 360
tggcggaaca tgccttggac tcattgctag aactgttggg gatgca 406

<210> 1813
<211> 439
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-D8
<400> 1813

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aagacgggac acctttgcct ctatcaagtg gtatcagatt tccaggttgc tcggtgagat 120
tttacagttt ttcgtagttt agatcgagtc tgttcttcat acctacagtc cacgaaaaag 180
ccacacaaaa aaaatttagg gttagttcat catatccgaa ccaatctgag cctttgcata 240
atcttttttag gggtttgctt tgttgaattt gcggttgcac cgtcgtgtct agttactggg 300
cttagagtct agtcttttag agtttcgagt tttggtcata agttgtcacg ccgccgccgc 360
accatcatca tcgcccctgc catctaccac caccgctccg aattcatatc gatatacgaa 420
cacgcgctac aacaacggc 439

<210> 1814
<211> 290
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-E10
<400> 1814

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gaaaaccatc acgatccagt gctacctcgt gctaaggcac gtccacccgc aggtgcacac 180
tctcgctgaa gggtctctgc atcacctctc cactgattcc gcagacctgc tatatgctcc 240
ccggtgagtc gtccaaccta gactcctcca acaggtcacg gagcatcaac 290

<210> 1815
<211> 387
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-E11
<400> 1815

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gaaaaggaac aggaaaagac tgcccgtcca cgcaatacaa caaaatatat gaccaagtat 180
gagcggggcac gcacacctgg cacacgtgct ttgcagataa gcatgaatgc cccagttatg 240
gttgagcttg aggggtgaaac tgatcctctt gagattgcc a tgaaagaact gagagcacgt 300
aagatcccct tcacgattag gcgctactta cctgatggaa gctacgagga ctggggagtt 360
gacgagctca ttgtggagga ctcgtgg 387

<210> 1816
<211> 403
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-045-Q1-E1-E5
<400> 1816

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ggagaaggta ccgtgaagaa gcccaatgag aatgagtact cagaattcgg tagccagata 120
actgatgtgt aacaagctac agtcgtataa catgccttgt tggagctgaa gcctgagaag 180
tgtgtttcgc tgggtatcta ggggtactaaa gtggtttctc ttttggaact atcattatgg 240
ttgtaatagt cgatgaagaa tcatatttta ctaattttat ctgcagaacg ttttttgcgc 300
gaaatacaat ggccgtccgt tgggtccctg atacgtctcc aacgtatcta taatttatga 360
agcattcatg ctatttgatt atctgttttg gatgtttatg ggc 403

<210> 1817
 <211> 400
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-E6

<400> 1817

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ctctgcggcc ccgtgctcga ccaggtcaag atcatgccgc tcaagctcta gtcgtccatc  180
ggagtagacc agaagctcag atcaatcctg tcgcgttgat tcggcatcgt cctctcgtct  240
actatgtagt agtagtgggt atgtaatttg tgacattgat ggacctctct ctaatcgtgt  300
gccagcgtgg tggaatgaat tgcctgtgct gtgcgtgaaa cagaagaaag agaggggacgg  360
atgaaaaaaaa agcggccgct ctacaggatc caagcttacc                               400
  
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<210> 1818
 <211> 403
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-E8

<400> 1818

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gttgctgctc caacagttga gcctctcgac cagcgcgcac tactaataag ggataaattc  180
agtgtgatg gttggctttg tccgcgttgat tatcaagtac acaaccccat agacaatcta  240
ctctataggg ttccagcttt cgagtgtact aatcccgaga agtgcaatgc taagtgcctt  300
gagacagttg aattgagcat tactgactgc ataataaata ccgtcaggac caattttctg  360
attagaagtc aaggctataa ccggaactgc acagcacatg cag                               403
  
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<210> 1819
 <211> 418
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-045-Q1-E1-F1

<400> 1819

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gatagcaaac tccaaaacat gagctgggtt tgctacacac gtgtgaacac gatgtcctag 120
acaagcatga ccacgtggta gtcttacaat aaaacactat cgagttcagg ttgggaacca 180
tcaacgaggg tatcgaagtc cttacataag tccggattag atcttatgaa ggaactcctt 240
ctccttgaac aaatcaatca gtggcttggt gtgctangga tacatataga ttgaagggtg 300
caagtcttca aaccacagaa ttcttcgcac gtgtgcatgc ctgatttgga atgattccaa 360
agaaagcaac attgactttc tcgaaatcac ggcggcaact tgcacagac gcacatga 418

<210> 1820
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-F12

<400> 1820

aatgcccggg tcgacgggca ggattgacga gtgggcaatg gaaatgtcga gctttggcct 60
caagtttgag agcacttcga ctatccaaag cagagcattg gcaaagttca tagcagagtg 120
gacgccaaca caagatgaag aaattccaga aacaagcatc cccgtcaagg aagcaagcaa 180
agagtggctg atgtacttcg atggtgactt ttcgctgcaa ggcgccggtg tgggcgtgct 240
acttgctgca cccaccggag aacacctcaa gtacgtagtc cagatgcact ttcccaagga 300
gcaagcaacg aacaatacta cagagtatga aggtttgctt gccggtctca ggatcgcagc 360
agaccttggg atcaagaagc tcattgtaag ggtgact 397

<210> 1821
<211> 382
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-F7

<400> 1821

gggccgacgg gatacggtag tcagaccaag cccgttttcc acaagaaggc aaaaaccacc 60
 aagaagattg tgctgaagct gcagtgccag agctgcaagc actactccca gcgcgccatc 120
 aagcgggtgca agcattttga gatcgggtgga gacaagaagg acaagggaac gtctctcttc 180
 tagattgctt tcacctatct ggagtcggtg tggtaagaa ctattactac ttgtcttgat 240
 gtttttgatg ttatgagttg aattgaccag accttctaata gtatccaaac ccctttatct 300
 ggcatttgag caaggaccga cttggcgaaa aaaaaaaaaa aaaaaaaaaa aaaaaaagcg 360
 gccgctctag aggatccaag ct 382

<210> 1822
 <211> 411
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-045-Q1-E1-F8
 <400> 1822

attccccgggc cgacggggcaa atctacagca ttgtccattt catgctccac taaagcaagt 60
 actatgtgaa aagttttgct tgccccactg ttaacttacc acaatcagtc atcatcaatt 120
 tgaacgccgc acttaataca ttacgcgata ttcgacaaac ccgtcggcta agcacacact 180
 ctctgctaaa acacatacac atatcagcat tcgatgagtt gacgttctat gatcactaat 240
 aaagcagatg ggtcaagtat tcattgatat aacaaaatgc actgctttgt ggagactgta 300
 ttgggggggca atacaccatc gtttaacatg acatgtgctt aattagctgc acgcttggct 360
 gcaaattacg cgcgaaagta tgggggatca atacgatata ctcaactttt a 411

<210> 1823
 <211> 399
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-045-Q1-E1-G10
 <400> 1823

attccccgggt cgacggggggg ggggaggggc aggggcgttg ggagcatctt tctcctacct 60
 ttagccctag gttacccgat tggtgagagc ggcgaccggt tgggaaaaat ctgcagcgac 120
 taggcgactg cgtgctaggg taggcatgga gttcttgatg cagcccgtaa ataggcagca 180

ggactctaataaagaagagggtcaacgagaacaagatgaacatggagcctcttcattaccctg 240
 tgagtctatgacgacgcggccggtggtgga gttgccggcc aacacggaat caagcgccaa 300
 cgaccagatt tgcactgagg gcgctgttcc aagggcaggc agtgcagaca acctcaagct 360
 tcagagcact ccatcgaaca ggggtccgggt tggggcaac 399

<210> 1824
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-045-Q1-E1-G3
 <400> 1824

cggtccagaaatccccgggtcgacggggtcg accacaacgc cgtcggttgcg ccgccggtga 60
 gccaaagtgc cccagcccca gatcgccctt cccatgtcag tgtacaagaa ttccgagctc 120
 gtgtccgtac cttggagagt gctttttctg atgcggattg gtttttaagg gatattcaag 180
 gtgaaataca gcagatgagg gaggaggggc atgagaaaga caggcaaatac cgatctctcg 240
 ttgaagatgc aatgaagaaa cgtcggtcaa gccacattag aatcaagcaa ttcgaccatg 300
 ataaagagct gatgcgtcga ttctttcagg gatgcaaaga aaaacttaag aagtcttctg 360
 atgcatttcg ggagtataag aagatgtgtg aaggaagtgg cgtgtcatct tcgggtgttg 420
 t 421

<210> 1825
 <211> 392
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-045-Q1-E1-G7
 <400> 1825

gggccgacgg ggaaaaagat cgaatgcatg agacgaacac gtatgcaaata gcaatgcaca 60
 tgatgacatg atataagatg cataacaacg acaacaacac acggagagaa agacccgaac 120
 ccgaggaaat aaattaactt aacgccgga acggcaagag ttggagtaca aattgggaaa 180
 gttatatccg ggggtgttaca aactccacc actacgaaag gatctcgtct cgagatctag 240
 gactgaaaga acaccgggta ctcagaacg aggtgatcct cgcgttccca ggtagcttca 300

cggtcggaaat ggtgtgacca cttgactttg agaaatttga ttgacttggt gcgagtcttg 360
cgttcagtct cttcaagaat agcaactggg tg 392

<210> 1826
<211> 405
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-H1

<400> 1826

cggtccagaa ttcccgggtc gacgggggtc gtcaatcagc gccgaggctc acccccatgc 60
gaccctagct tcgctcgctc tccggcgtag cttctccctt ttccctgccg cggcggatct 120
gcgtcggcat ttgacggcgg ggagctgaca ttacaggcct ggtctgcacc aatggaggca 180
atgcgcaaaa aggaggcaac agcaacggct tgttctgaag acaaccgtaa aggtgtacat 240
ggtgtatcca tgaatgggct atacgacatc tggaatcctg cctaccctcc acgtgacatc 300
agtccatgcg atgctgacat ggctgctcat atcgcatcag tcaaggagtg gatggacaaa 360
acacaggcta tacttgctaa ctccagagca accaatataa tcata 405

<210> 1827
<211> 325
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-045-Q1-E1-H10

<400> 1827

cccgggtcga cggggaagag gagctgtacg aggacgagga cgacgccgac ctccaggagt 60
aggggcgtgc gaggtctggg ttcttctgtg atcgcgctgc tgctcagtcg ggggctatct 120
ctgatggctc catgttgctg ctactagtag tgtgtgtgtg tgtgtttcgc gcttgctggc 180
cccatcttc ggggtgtcgt ggacttggtg cttgtgtagt ttgtctgtgt cgggttaatt 240
cggtagtcag tttgttgccg gtgcgttacg gtgaactaga ggtcttagta gcaggtttgc 300
aatatggctg gctcattggt tcttc 325

<210> 1828
<211> 385
<212> DNA

gggccgacgg ggaacttggg cgccgtccac aagggttcca ggggctcaga tattggccgt 60
 ggcgagcggg aagcgttgac agttggtcta cgcagaaaca tagagttgtg ctgcctagcc 120
 ttgattcata tctactacc agagaccttt gtcaatttat taaccgccc tcttgagttt 180
 gcaccttacc tcagtggctg tctggcggtta cagtcttga ctgccgtgat gagtttaatt 240
 atattgaatg gttcatacgt tgggtcttat cacaacggct tctggagctg ctgagattcg 300
 ctcatcagcg agatgcctga gatacgactg atccagacgg tctaggcgct ccatctttac 360
 c 361

<210> 1831
 <211> 395
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-A9
 <400> 1831

tcccgggtcg acggtgatcg ctagatccaa cgctccaacg actacgaggg gctgggcaga 60
 tgcaacagga cgaggggctg gtactagcat aggaaccata agtagggctg ggaggtgaac 120
 acgaggaggt gccgcaaaa gggcaactgc atcaactact ataggagcac atgcaaagtc 180
 tacaagatga ccaagtccaa ctattgctag acgatcacta gcagcatctc cttgcatcca 240
 tcagctccct cctgtcgatc acctgttag tgttactcga tcaagatcct caagatgacc 300
 acctcatgtc ccatcaccag accacgttgt gttctcacat catgcacat tacattatga 360
 ttggcaaacac tttccctcac tatacttcaa gtcga 395

<210> 1832
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-046-Q1-E1-B10
 <400> 1832

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 cggcgagggg aagacgaggg gcaggaagaa gggcagcaag gccagaagg gcgtggagac 120
 gtacaagatc tacatcttca aggtgctcaa gcaggtgcac ccggacatcg gcctctctc 180

caaggccatg tccatcatga actccttcat caacgacatc ttcgagaagc tcgccgggga 240
gtccgccaag ctgccccgt acaacaagaa gccaccatc acgtcccggg agatccagac 300
ctccgtccgc ctggtctctc ccggcgagct cgccaagcac gccgtctctg agggcaccaa 360
ggccgtcacc aagttcacct catcctaggc tantctgccg tgt 403

<210> 1833
<211> 418
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-B4

<400> 1833

cggtaagaa atccccgggtc gacgggggggt cttaaggatg acgaaagcgt cagtgcagac 60
atcaggcgag agagatatcg agactgcaaa tcgctttcct gtttttgcac ttcttactgt 120
ttatgtaact ttgtcagtat tcagatcata tagcctatgg ggagcagtgt aaaacataat 180
ttgttgatgc ttaaaatttg gagtgatatg tttgatacat ctgcactgtt gacatgggtct 240
tctttaatga ataacaaggt ggtccagtag aattgtaact ttagagccct gcaaattgtc 300
tgtgcaaatt atgatgctgg tttatagaac taaatttggt gcgtgcctct attttatctt 360
tagttgtagg tttctccgaa gctttattgt gggttgtgtt acttgccaaa caagttct 418

<210> 1834
<211> 389
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-046-Q1-E1-B5

<400> 1834

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tcatgtagtt gacaccgtat ttgtggcaaa gccaccgttc ataattcttt catacatgtc 180
actcttgatt cattgcatat cccggtacac cgtcggaggc atccacatag agtcatattt 240
tgttctaagt attgagttgt aattcttgag ttgtaagtaa ataaaagtgt gatgatcatc 300

attattagag cattgtccca agtgaggaaa tgagatggag actatgattc cccacaaagt 360
 cgggatgaga ctccagaaaa aangnnnaa 389

<210> 1835
 <211> 405
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-B6
 <400> 1835

ggtaccgagt ctggaattcc cgggtcgacg gggaagaagc ccaaggccga gaagcggccg 60
 cccaagtcca aggagggcgg cgccgacaag aagaagaaga aggccaagaa gagcgtggag 120
 acgtacaaga tctacatctt caaggtgctg aagcgggtgc acccgacat cgcatctcc 180
 tccaaggcca tgtccatcat gaactccttc atcaacgaca tcttcgagaa gctggccggc 240
 gagtcggcca agctagcccg ctacaacaag aagcccacca tcacgtcccg ggagatccag 300
 acctccgtcc gctcgtctc ccccggggag ctgcgaagc acgccgtctc cgagggcacc 360
 aaggccgtca ccaagttcac ctctcttag atacgccgtt cctgt 405

<210> 1836
 <211> 412
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-B7
 <400> 1836

attcccgggt cgacgggact gtggaacca gatcgaagca gaggggataa gagaacggaa 60
 ctggcatcgt agaagaaaag ctggattgat tatcacgagt tgcaatcatt gtggtaaaaa 120
 agaacctggc tcgatacaat gttaggaaaa tatacctctt cgtattatca tataagtagg 180
 ctgaagccat catatataaa tataccgaag gaaggccgaa gatcataatg caaaaggcca 240
 aaggacacta taaatataac tctaacagat accacttctc ttaaagtga cattgaaaat 300
 accaaagccg ccggcccgag ggggtttaca tactaaccac gctaattggaa attactgagg 360
 tactcaacac acagaatagc ctagaaaaca aaatttagaa atcacagaca ca 412

<210> 1837

<211> 405
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-046-Q1-E1-C10

 <400> 1837

ggtccagaat acccggtcg acggggtgct ctcaagcggg tgctttttaa taagaggctg 60
 atagctcaac ataaaagtaa atagataggc cttcacaga gggaagcagg gatttgtaga 120
 ggtgccagag ctcgatttta aaatagagat gaataacatt ttgagcggca tactttcact 180
 gtcaacgcaa caactatgag atggcgatat cttccatgct acatacatta taggcgggtc 240
 ccaaacagaa tggtaaaagt ttatactccc ccaccaccaa caagcataaa tccatggcct 300
 gctcgaaaca acgagtgcct ccaactaaca acagccccgg ggaggttttg ttttaattatt 360
 ttgatttgct ttgatctttt ttatcatggg actgggcata ctagt 405

<210> 1838
 <211> 437
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-046-Q1-E1-C11

 <400> 1838

ggtccagaat acccggtcg acgggaactt ctacggattg cctggcgcgt tgatggagat 60
 agggtagttt tgcagtagag ctactgtttt gttgttctga atgtttccta gctctgctgc 120
 tcttctccct ggttggagct gaaaatgttc tgtaatttc tgagggactt gctgaacctt 180
 tagtttaa at tctcccttat aataatttct gctgcagcta ctgttctggc tggaccgaga 240
 gctgtaaaca gtatagtctg gtttggcctt ggctttttaa taaaagtggg gtctgggggg 300
 caaccctct catttaattc agttctgtat ttctcctatg gctgttggcc gctttcattt 360
 gtttatataa tttccagtg gcttttagtc cacgagtgtc tcctgaatat gttatttctt 420
 cggaatggtt aacgcc 437

<210> 1839
 <211> 413
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-C12

<400> 1839

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gggccagaat acccggttcg acgggagagg cgaagcggcg gttccagcgg atccaggagg 60
cctactccgt tttgtccgac aaggggaaga gggccatgta cgacgccggg ctctttgatc 120
ccctcgacga cgacgaccag gattttctcg acttcatgca ggagatgctg gtgatgatgg 180
atagcgtgaa aaacgagaag ccggacacgc tcgaagacct gcagaagatg ctggatgaca 240
tagtcaacgg cgacggcggg agccgcgcca ctgctggtgc tggtagtagc ggccggcggg 300
gtggtggctg cggtagtcgc gttccaccgg aggccaaccg cagaactcgt gtcgcccctt 360
acccgcagcc ttcgcgaagg tgatggacgc gccggtgctc gtgacgtgca cgc 413

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<210> 1840

<211> 365

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-046-Q1-E1-C2

<400> 1840

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agcgaggaag aaggggtggg agggcctccc tcgccagtga tgcttgggag agaacaacaa 120
ggcacgctga tcgagacgag ccggcagtgg gtaagagccg tcgccgagga tgaccgctg 180
aacgttgca cttctcacct tccccggcgg agaggatctg gctggatctg tgaccagcgg 240
tgagtagaga gagagagtgt ggccaccgct gtcgtgttta gatctggaga ggacgagata 300
gtgtgaagag agcancacta gcaagcaagc gcagaggctc ctgcctatat agtggagtac 360
tagtt 365

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<210> 1841

<211> 437

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-C5

<400> 1841

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gggtacaagg cagaattccc ggggtcgacg gcacataatt cgtatttgca ataataataa 60

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catcattaat ccttaccata ggtttcttaa tgggtggaatc cgcaagggtgc aaattttaag 120
 agcaatcatc aaattcacgg aaacctaaca catcacgcaa agttttttgga atcgtggaaa 180
 cactagcacc caaatcacat aaatcatagc attaatacata tttaatttta attttaattt 240
 taatagtagg ttcccactca tcataaagtt ttctagggat agaaacttct aattcaagct 300
 tttcttcata agattgtatt aaagcatcaa taatatgttt ggtāaaagct ttattttgac 360
 tataagcatg aggagaattt agcacggatt gcaacaagga aatacaatct atcaaagagc 420
 aattatcata attaaat 437

<210> 1842
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-C6
 <400> 1842

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 cctcctcccc ctttccccgg ccgagtgcgg gccgatgtag ctccggcggtt gttcgaggcg 120
 ggacgtatgc tgcggtttgg cggtcgggtg cgtcctttgg ggcaaagccg gtgactttgg 180
 ctggtcttgg ggggtgtctg atgcagggcg gcggccttgg cggtgggaga cgcgacgttt 240
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 tgcgggtggt tggcggaggt aggggtgcgtt ggaggggtgt gagcgccggg tacaccactt 360
 gctcatgggc cgacgggtggc gacgtccgtg gacgccgtat ccttcac 408

<210> 1843
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-C7
 <400> 1843

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 atccagaaga acgcgaccat caaggacggc accgtcgtgt agagcgccgc cgggcccggc 120
 cgacgggggtt ccgcgacaac ctctgcgctg cgctgatcgt tgctgctggc ttctcggggc 180

cgggactgga ggagtgaccc ggggacgggg gccgtttgaa gctttgaatg gctgagactg 240
 aaagtggagg cgcgcgacagg cagcatcagt agtaagtagt aagtagtaag tagcagtgga 300
 acaaagtaat agtcgttcgt tttgccctg taataataa gaagaggctg tgtgttgagg 360
 tgaaaaaaaa aaaaaaagta aaaaaaaaaa aagcggccgc tct 403

<210> 1844
 <211> 412
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-C8
 <400> 1844

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 gcagcaatcc ttgagtacct tactgccgag gtccttgagc tggccggcaa cgctagcaag 180
 gatctcaagg tgaagcgtat caccctcgc cacctgcagc ttgcgggtccg tggagatgag 240
 gagctggaca cctcatcaa gggcaccatc gctgggtggg gtgtcatccc tcacatccac 300
 aagtcactca tcaacaagac ctccaaggag tgaatgaaat gcaataacgg gtagttgttg 360
 tgtgttgat ctctgtgat ccttgttatg ttgtgccatc tgttacgtgt tg 412

<210> 1845
 <211> 426
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-D10
 <400> 1845

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 ttagtgtgga tatggttgac ccagttatct ctgttgatat atgatgcata tgtttgtggg 180
 gcattttcat ggcatataat gccacagggt attttcacct taagtagaat ctgataataa 240
 ctcaacttga acatatcggt gatcgggtca tggtgccact gaatcgaggt ttcccagtcg 300
 aaccacattt gcctttatgg gaaggccttt attcagtcgc ttgtcatgcc tctgggtcgg 360

gcctccaacg attgaaggtt atgggcatgt ggtaccctgg cccggttaagc agacataacc 420
ttgtgt 426

<210> 1846
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-D12

<400> 1846

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aagatggtga tattagtgtc atgctagtgg gtagttgtgg attatagaaa tacttgtggt 120
gaagtttgtg attcccgtag catgcacgta tggatgaactg ttatgtgatg aagtcggagc 180
atgatttatt tatttattgt cttccttatg agtggcggtc ggggacgagc gatggtcttt 240
tcctaccaat ctatccccct aggagaatgt gtgtagtact ttgtttcgat gactaataga 300
tttttgcaat aagtatgtga gttatttatg actaatgttg agtccatgga ttatacgcac 360
tctcaccctt ccatcattgc tagcctcttt ggtaccgtgc attgcccttt ctc 413

<210> 1847
<211> 115
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-D3

<400> 1847

ggtcaagaaa tcccggtcg acgggcagcc caacctctc cagttcgggt ccagcacctc 60
cgagatcctt gagactgaat ccagaaagga actgtccggc caattaccaa ggaac 115

<210> 1848
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-D4

<400> 1848

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tcgatataac ttacaâacct cggcgagcta taaagtcaca agttttggct gactttgtcg 120
ctgaatggac cgaagctgaa ctccctaaag agtacggcgc atactccaat tggattatgc 180
agttcgacgg ctctaacatg ttggccggac tgggggctgg tgtcgtattg acgtccccga 240
ccggggacac agtccagtac gtacttcaaa taatatacac ggactccaac aacgcagccg 300
aatacgaggc ccttttacat ggtctccgga tggcaatctc catgggcatt caacgcctag 360
aggtgcgcgg ggattcaaac cttgcaatat cccaaataaa tggagacttt gacgc 415

<210> 1849
<211> 391
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-046-Q1-E1-D6
<400> 1849

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tcttgatgac gacgatgatg aggaagacac cgatgacgat gatgaggatt cggaggatga 120
tgatgtgcga gaagagacgg aagaggaatt ccttgcaaga tatgctgctg ctgctggcga 180
gtcaatcgag gttgttgagg aaggagacat agatgaagaa acccaagaca ttgaactggg 240
ttccctggac gaaatggaca tacaacaagt ggttctttca ctgattcaga aacatactgc 300
tctcctccaa gcgcaggttt tgccagatga cctaattgag agaattgcag aaacatttcc 360
tgaatatgag cagctggtgc atgctcacca a 391

<210> 1850
<211> 431
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-046-Q1-E1-D7
<400> 1850

ggtaccagtc tagaattccc gggtcgacgg ggcacgactg acccttattg tgttgctaag 60
tatgggcaga aatgggtgcg tacaaggact atcattgata gtttactcc caagtggaat 120
gaacagtaca cttgggaagt gcatgatcca tgcactgtga tcaactattgg tgtatttgac 180
aactgccact tgaatggcgg ggaaaaggct aatggtgcac gggataccag aattgggaag 240

<210> 1853
 <211> 382
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E1

<400> 1853

cgggtcgacc ggccgtacaa tgtggtacga caagtacgt aggggcttct gtacccttta 60
 atatggtgtg agaagtccgt acactttcac aagtgcggca ccccgactt atagcactat 120
 atgcatcagc tccgaatcat gatttgggcc aatagttggg ttgcctggc tcctatgttt 180
 tggcgcctta tgttccgcta tatcggctaa ggtagcacta ggagaaccac tgcgattgtg 240
 ccccggttga gctgggttaa gcacctcagt ggagaaagct aaaactgact gtcgatgatga 300
 ggcgagagac cggtcgctgt tcgagaggtt tttcaagtcc ctaaagactt atgccgcttc 360
 gagcgaggag ctggataacc ct 382

<210> 1854
 <211> 399
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E10

<400> 1854

gggtcgacgg gggggtcaag caactgacag ccatagcctt gcagaaaggg cacggcgtga 60
 gaaaataacc gagcggatga aaattctcca agatcttgtc cctggatgta ataaggttat 120
 tgggaaagca tcagtccttg atgagataat caattatgtc caagctttgg aacgccaaat 180
 tgagttcctg tccatgaagc tcgaggcggg taacgcccac gcccatgctc acaacggagt 240
 tgaaacattt ccaactaaag acttcgctgc gccggcatac aacacagctc cagggttaac 300
 atttgaccgc caaacaccaa gggagtagcg ccagggtcgc ccggctgcag aatggcttca 360
 catgcagatt ggtggcacct acgaaagagt gacgtgagc 399

<210> 1855
 <211> 418
 <212> DNA
 <213> Triticum aestivum

gggtcgacgc gggttttatg aagggaacta tttggggtcg cgcggaagca aaattagcta 60
 gggtttatta gtgctgctct agttccgctt gctattcctt tcgcttggtc gtttgtttct 120
 ttaaggattt tattatcaag gttgtaaggc tggggatgtg cagctagctt cagtttcaag 180
 cctgccgtct cgctgctgg tacattgtaa aacagaaccg ctgctctcca gtgactgaat 240
 gattataagc agctactgta gtagtatttg gggaaaaaat atgtaccaa ctgttctgat 300
 ctg 303

<210> 1858
 <211> 237
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E4

<400> 1858
 ggtccagaca tcccgggtcg accgggtcatc aacacgcacg gtgtcatagc tgctggctcc 60
 gtgcggccaa aagcgggagc tgctgcagcc ctataaccga ctttaagctgt gtgcgggtggt 120
 gtcataagga gcctgtccat caccactata gttatcccaa gtttcacttc atatcgaca 180
 tgttgattta cctttcattt ttcttgacgt cgtcaacgtc cgctgtcta taacgtg 237

<210> 1859
 <211> 392
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E5

<400> 1859
 taccagtcta gaattcccgg gccgacgggg acgataacaa ctatgtgccc cctgaatacg 60
 gtgatgctgc aacgggggaa gctgctgaag atcaagagga accagacgat gtgccaatg 120
 atgctgcaac gggggaagct gctgaagatc atgaggaacc agacgatgtg cccgatgatg 180
 atgatctccg ccgggtcatt gtcgatgcaa ggacgcaatg cgaaagtcaa aaggagaagc 240
 tgaagtttga tcgcatgtta gaggatcaca aaaaaagggc tgtaccgcaa ttgcgaagat 300
 gacaatacaa agctcggtag cgtactggaa ttgctgcagt ggaaggcaga gaatgctgtg 360
 cctgacaaag gatttgagaa gctactgaaa at 392

<210> 1860
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E6

<400> 1860

gtaccagtct agaattcccg ggccgacggg aatggattga gtttcccctt tgaagttatc 60
 ttatcggatt gagtctttaa agatttgaga acacttgatg tatgtcttgc cgtggatatc 120
 tatggtgaca atgggatatc acgtgattca cttaatgatg gttttggtga tcaacttggtg 180
 gggtccgccc atgaacctat gcatatgggt tggcacacgt tttcgtcgtg attctccggt 240
 agaaactttg gggcactctt tgaggtccta tgtgttggtt gaatagatga atctgagatt 300
 gtgtgatgca tatcgtataa tcatgccac ggatacttga ggtgacattg gagtatctac 360
 gttacattaa ggttttggtt gatttggtgc ataaagtgtt attctactac aaactctaag 420
 gctgttt 427

<210> 1861
 <211> 401
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E7

<400> 1861

gtaccagtct agaattcccg ggtcgacggg aaaggcactg aactagtttg caacaaagaa 60
 gagagaaaat gtctaccgct gaggcaaccc gtgaggagaa tgtgtacatg gccaagctcg 120
 ccgagcaggc tgagcggttat gaggaaatgg tcgaattcat ggagaagggtg gccaagacct 180
 ctgatgtagg tgagctcact gttgaggagc gcaacctgct ctctgtggct tacaagaatg 240
 tgattggtgc ccggagggct tcttgaggga tcatctctc cattgagcag aaggaggaga 300
 gccgtgggaa cgaggcctat gtcgcatcaa tcaaggagta ccgtaccagg attgaaaccg 360
 agctcagcaa gatctgtgat ggcacctca agcttctgga c 401

<210> 1862
 <211> 399
 <212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E8

<400> 1862

aattcccggg ccgacgggag catgcgacgc gaccggcgct ggtttgggcy gctggagcaa 60
gaagaccaga gggtgaagaa gcactatgac cgttggatgg acatcgtacg gtcactggag 120
ctagaatcgt tcatattgac taagttgaca aagccctcag tcccatcaa cttagtaggc 180
ccacaagtca gcctcccacc aaggtgggtc ccagctaaca ggggggtatt catTTTTTTg 240
tgcgtaataa ggaggcactt cgggtgggtc cgagctgaca gcaggggaac gttttttgcy 300
cgaaatacga tggcccgtec gttgggtccc tgatacgtct ccaacgtatc tataatttat 360
gaagcattca tgctatttga ttatctgttt tggatgttt 399

<210> 1863

<211> 427

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-E9

<400> 1863

cggtccagaa atccgggtcg acgggtaaaa acaaagatgg tagtgaagtg tttgattggt 60
ttgagaaata tgttctgcgt tcgaaattgg atgttagcat tgatcaccta gagctgtgct 120
cactgttata acatgggtgg gatgcaagag ataaacatat caccttattg atgaatgctg 180
gtctcctgac acgccaacta atagatccaa acatgtactg gttttctatt ccaagtattg 240
gtcctatccc aggttcacac aaaagattgg tgaccatggc atcagtatac aaattaactc 300
tacaagcctt ttccatgtcc acatcatttc cctcgatgca gtccaaaaga acaatttgta 360
atgattctat agttagcaat taccaatgta aaggaaatct attatttgca gcagctccta 420
ctgagct 427

<210> 1864

<211> 438

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-F10

<400> 1864

gggccagaat acccggtcg acggggcaaa tgacaggaag tcactacaac gagctctgga 60
taataagata tatcttctcc tgtatggcaa aacttttggg gtcctgatg gcaaacctgt 120
ttggcatttc ccagaaaaag tgtacgaaaa tgaagactct ttgcgtttgt gtgccgagtc 180
agccctaaaa tctgttctcg gcggaactga caatacatat tttgttggca acgctccaat 240
ggctcacatg gtaactgaac aaaaagagga ttccagtgtt tcaccattca agcggttctt 300
cttcaagtcg caagtgatcg gcaccacgca tttggacatc aggaggtgcg aagaccacgc 360
gtgggtgacc aaagctgagt tgctggaata ttttccggag cacaaggatt tctttaataa 420
gatgattatt cacgttag 438

<210> 1865

<211> 404

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-F11

<400> 1865

cggtcctaaa taccgggtc gaccacagct gggacctcaa cttcagtcga atccgtgaca 60
cttttttggtt gcggggcttc ttcagtgaag gtttcttatt gaactgatgg tgtgtggata 120
tgctccaaaa acgcattact gggaatggct tctctcttgg aacctatttt tgccaaatca 180
tcatccgctt gatctttcag tcgggggtata tgatggagct ctaacccttc gaatttcttc 240
tctagctttc tcaactgcatt gcagtaacca gtcattgctg gaattctgac gtccactcc 300
ttcatcacct gattaaccac caaatctgag tcgccataaa ccacggggcg acggacgccg 360
agtgaatgg ccatacgcaa cccatacaaa agtgcttcat attc 404

<210> 1866

<211> 389

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-046-Q1-E1-F2

<400> 1866

gggtcgacgg gcattaagca gttctccgaa atttcatcaa taaaccagcg aattttatta 60

tctggtccat cgggttctga gatttatcag gaaacattga taaaggcact tgccaaacat 120
 tttggtgcta gactacttgt tgttgattca ctctgttgc ctgnggtgcc ttcaaaggac 180
 ccagaaaccc agaaagatgt tggcaaggct gataagtcag gggacaaggc angtggtgag 240
 aaattgacaa ttcttcataa gcatcgctct tccttggcag acacaatgca cttcagaaga 300
 ccagctgcac caacttccag tgtgaatgct gatattgtgg gtacatccac tctacattct 360
 gcaactttgc ccaaacanga gtcctcaac 389

<210> 1867
 <211> 298
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-F3
 <400> 1867

ggtctagaaa tcccgggccc cccgaggatt gaagcttacg tgcaccatct tgctaaattc 60
 tatctcttcc acagtgtctt ataaatccat gtcataggac gtcgatttcc tgtctctaga 120
 atgatgagta ctgactttca tacaagtga gcctcgctgt cgtaaattcg tctctcgaca 180
 tctgtggtca tatectataa gcacccaaag attcgtcttg tgttgctttg cactgcccct 240
 atggagaatt tgacacccac tgtcgtggca catcaaccac ttcagttatt gcgattac 298

<210> 1868
 <211> 408
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-046-Q1-E1-F6
 <400> 1868

aattccccggg tcgacgggca cggggctagg gtttgggggg ggttcgggct gggcctcccc 60
 agcttataaa gccggacgag ccttagtgct cgggtcggac acggcccgtg ggtcggttgc 120
 gcattttttt aaaataatta cgctcagaaa aaaaacaaaa agactactaa acggactcca 180
 aaaatcctga aataaatttt ccccggcttc taaaatcaag ccgcacatga tgaacattta 240
 tttggggcct aaatgaaatt ttgaaaaatg cacattttcc taaattcaaa taaaatagca 300
 aataaaacca aataaaaatc ttgtttgact tttttattaa atcctcaatg tttctttatt 360

tttgggaaag tcattttatt ccctctctca tatttttata ttagaaat

408

<210> 1869

<211> 402

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-F7

<400> 1869

ggtagcggtc aggaattccc gggtagcagg gggggaccat gtggtggtga atgtggacgg 60
ttttgcgaac accaaggatg atggcggtgc tgagaagcca tctgaggctg tgcggtggc 120
tgttgtgat atggcggagg atggtggcga ggatgagcca ctcacccagg ctgcagagtg 180
ccgcatatgc caggaagagg acagtatcaa gaatctcag aagccgtgta cgtgcaacgg 240
cagtctgaag tatgctcata gagcgtgtgt gcaacgctgg tgcaatgaga aaggagacat 300
tacatgtgaa atttgccatg agcaatataa gcctgggtac acagcaccac cacgtgttca 360
accagatgag accagcatag atataagtgg ggattggacc at 402

<210> 1870

<211> 443

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-F8

<400> 1870

aggtaccagt ctagaattcc cgggtcgcag ggtgaagcag gttcatcaat ctcagcgcct 60
ccgactaccc gctcatgccc caagatgacc tccttcatat cttctcatat cttccaagag 120
atctgaactt tatcgaccac acaagcaata ttggttggaa ggagcatcaa agggctagac 180
caatcatcgt ggatccagca ttgcagatct caaacaaaac tgagggttctg acaacaaagg 240
agaaaagaag catgccttca gctttcaaaa tattttagg ttcgtcgtgg gtaatattga 300
gccgatcatt cctggagttc tgcatattgg gatgggacaa ccttcctcgc acgctgctca 360
tgtacttcac caatttcctg tcgtcctcgg agggatactt ccacacgggtg atctgcaact 420
cacaagttca acaagaacac aac 443

<210> 1871
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-F9

<400> 1871

cgggccagaa taccgggggc gacggggagg gttaatacata agtgggatgc ttgtccaagt 60
 aagggtagta cccaagcacc ggtccacca catatcaaat tatcaaagta ccgaacgcga 120
 atcatatgac tgtgatgaaa actagcttga cgataattcc catgtgtcct cgggagcgct 180
 ttcctttata taagagtttg tccaggcctg tcctttgcta caaaaaggat tgggccatct 240
 tgttgacact tatttacttg cattacctgt tactcggtac aaattaactt atcacaaaac 300
 tatctgttac cgataatttc agtgcttgta ggaaatacct tgctgaaaac agcttatcat 360
 ttccttctgc tctcggttg gtgcgacact ctacttata gaaaaggcta cgatagatcc 420
 cctacac 427

<210> 1872
 <211> 416
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-G3

<400> 1872

cgggccagaa ttccgggggc gacgggggacc aaaaaaatac ttaggatttc ttattgtact 60
 gattgaactc gacaaattct tgccccgcac aagcaaagga aaagaactag gcctgtcgat 120
 actggatttt accatagttc tagttctaaa aaagactgtc aatttcttct taaaaatagg 180
 gctctggcag ggttctgggt agtggcccaa accgatacca atagggatga gggatatata 240
 cttatgaatt tcataattga ttctattccg caattcataa ctacgaaagt aagaggcgcg 300
 aaatcttttt atccaaaggt ccctaaagga cattcctttt ttgctcctaa gattgaagaa 360
 gagattatac gaaagactat caagacttcc taattatctg acactaccta cactaa 416

<210> 1873
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-G5

<400> 1873

aggtaccagt ctggaattcc cgggtcgacg tcctgagagg ctggcggcgg caccttggcg 60
gggtccttct catgatctcc ggcttgcttc cgggacatgt ccgtgaactg cgtcacgtag 120
agcttatggc ccatgacggg gctgtctctc gtgacgcgct ggcgcccatg caacatcatc 180
atcgacagca ggcatgcgcg gagagccctc aaccccatc ccgagctgat caactcgatg 240
agcttatcca gctgggccct gaggatgtca atcatggagt tggaccgctc aagttgaagg 300
ttgttcctgg cttccaccag cttgttattg gctccttggg gggccacact gtctgccagt 360
gtaatcgctt gccgtaagtc ctctatgtag atttgacgga cttgctcggt gagcacgggc 420
tccgaaa 427

<210> 1874

<211> 388

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-G6

<400> 1874

aattcccggg tcgacgggag acagcaggtg tctaaggtgg agtagaagga tgcggctgct 60
ggagcttttc tccctccgtg caccgaagaa gcctttgtgc aaaatttgaa ccagacattg 120
cttttgtaga attgttggtg cttagtatta cgattctagc aataccgctc gctttataga 180
tcccctactt ctacatgtac tcaattgtac atatcacgcc cccatttgta ctctactat 240
cttaaagaat aatcgtcaga gctaaattgg accgctcaaa ttgaaagttg ttcttggtt 300
ccaccaactt gttaatggct ccttgaagc ccacactgtc tgccaatata aaccggccgc 360
tctaaaggat ccaagtttac tttaccgt 388

<210> 1875

<211> 396

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-G7

<400> 1875

gtaccagtcc agaattcccg ggtcgacacc ggcattctatg cggcgcatcc ttcctttgat 60
gacagtggca tcccgccacc tccatcaaag tggaagggtt catgccatgg tactgtctgt 120
gcccattgca ataacaaatt gagtgggtgcg aagttcatca ccgtaaatga ctctggagat 180
gtcatagggc atgggacaca tacctcgtcc acggctgctg ggaactttgt cagtgggtacc 240
tcggcccagg gtctcggcag ggccacagca gccgggactg ctccacatgc acatctggcc 300
atgtacagca tgtgtacgct tcgtgggtgt gactccgctg acatcgttgc ggggatagac 360
gaagctatca aggatggggg tgatgtgctc tctcgg 396

<210> 1876
<211> 422
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-046-Q1-E1-G8
<400> 1876

aattcccggg tcgacatata atagacatgt ctctccaat ggacgggtga catctggcac 60
accgaggagc agacacgtgt ttctcccgcc caatgagaat attacacatg gaaaatcacc 120
attgggtctgg gctgttaacg gggtatcaga tccaaaaccg gacacgatag cttaatggca 180
ttccattacg gtggatgcca catgtcggtc acccttgatg aaagcacttc catgacgcgc 240
gatttatcat catggaactg gacacttccg tgatgataat tttggtaatg tcatggaaca 300
cttctacggc agcacaggta tgactatctt gattctgtca taaaatcgtc atggatgtac 360
atgcatgaca gaaaacgtga cctactgtga caaacacgta acatcacgga agtgtccttt 420
tt 422

<210> 1877
<211> 97
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-046-Q1-E1-H1
<400> 1877

gggtcgacgg gatgactaat gttgagtcca tggattatac gcactctcaa ccttccatca 60
ttgctagcct ctccgggtacc gtgcattgcc ctttctc 97

<223> Clone ID: LIB103-046-Q1-E1-H2

<400> 1880

gggtcgaccg ggatgaatga atccattgtg agaagagccc ttgtgaccat gcaccagagg 60
gacgaagtgg agtacaagag ggagcgccat gtgattgtcc gcaaggcttg agctgaactg 120
aaccgatgga gctaccatgg aaccctctgg ccatctgatg tgtgtgtata agtagtgctg 180
aactgcagc ccgtttcctg aggaattttg ttgggtcggt gaaattgagt tgtagttgta 240
ctactttgag ctgtagctgt agccctaaat catattgtgt cgaactgaag atgtacccca 300
gtaagttcat tcatgaatgc gacatttttg cgttctgcag ctgagcagag tcaatgccta 360
agaaactgaa acttgctcgt 380

<210> 1881

<211> 395

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-046-Q1-E1-H3

<400> 1881

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cggcggcggt ggcggtgcag ctgcceaagg agtggagcac gtggacgatg aagacggcga 120
aggtggtggc gcaactggggc ttcateccgc tcattatcgt cgtcggcatg actaaggag 180
acgagcccaa acctagcttg ttccagcttc tgtccccgt ctgatcccat ccccggcgag 240
ccctagactg gatcgatcca gctcctttta gttactacta gtagatgttt ttgctgttta 300
ttgaatcctg gtggttgagt tcttgatccc tngtgggtga tcttctatct gatctgtgtc 360
gaataatgtt atgtcgggtg atcgatcctg gattg 395

<210> 1882

<211> 88

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-H5

<400> 1882

tcgacggcgt tacaggcagc cccgggaaca atctcggcgt gctggtgaca attgatgagt 60
gacatgttga agattcctgt agcacgtg 88

<210> 1883
<211> 358
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-H6

<400> 1883

aattccccggg tcgacgggta ccataaacct tcctcaaac atccaccata cctacctatt 60
atggcatttc catatacatt ccgagatata ttgccatgca actttccacc atctagttca 120
tcatgacaca ctcgtcattg tcatattgca tctcctggta caccgccgaa tgcattcaca 180
tagagtcata ttttgttcta agtatcgagt tgtaattggt gagttgtacg aataataaca 240
gtgtgatgat catcactatt agagcattgt cctagtgagg aaagaatgat ggagactatg 300
attccccccac aagtcaggat gagactcaa acgaatgaag agaggccaaa gtagccca 358

<210> 1884
<211> 423
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-046-Q1-E1-H7

<400> 1884

gtacctagtc agaattcgcg ggtcgacggg gatgggtggt gcccccatga tcacattggt 60
tagtttctctg agaacaaaga agaatgggtc acacgttgcc tcgtgaggac tggaagcccc 120
atattctggc catgagccca tgatcatgct cctgggagaa gcaaaagtgtg tttctttagg 180
ttttgcttag gatgtacaca gatgtaaatt aattaccaat ttactatgct tcgtctaaag 240
aggtgacaag gcatgcaagt gatgagtcac ttcgcagcca agcaagtact gtacctgttt 300
cgcgtaaacc ctcaccttac tgccagctta ctggtggtgg tgccaaacaa tggttttcaa 360
ctgacttctg atttacatgg tacaaaanan aaaaaaaaaa agaaaaaaaaa aagcggccgc 420
tct 423

<210> 1885
 <211> 295
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-046-Q1-E1-H8

<400> 1885

ttccccgggcc gacgggggagt gagacgctgt actgcttgct ccctttcggc atttcctttt 60
 taccaccact actgcttaag tgtcttttga agtttgtttg aagtgttcct cgtcgttggtg 120
 gatcagtatt tggagtttga gtcagttgag tgtgttgctg ctgatgtatt tcaaagcaca 180
 gtggatcagt atttggagtt tgagtcagtt gagtgtgttg cgtctgatgt atttcaaagc 240
 accgtgtgat ggtagactcg ttatattatg aaatgatgtg gtttttttgt ctgtt 295

<210> 1886
 <211> 367
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-A1

<400> 1886

taccgggtcca gaattcncgg gtcgacgggg acctccagaa ggtgatggac cggagcgacc 60
 tcaccggcgc gcgtgcagcg gcagatgctg ccccgcaact cccctgaaa ggacctggct 120
 gggacgtcgt ggtggctgcc gggggcggta tgctctcagc gtcaccagc tgagccccgg 180
 gcccgtcca gtgaccggcc tgtcaacggc gaccgacgcc ttggtattct ggtgcttcgg 240
 ctttgttcgt cgctgtgtt aaggccgatg tttttgtgaa catgatgtgg acatgacaac 300
 ggcacacctac cccccctaag taattatgga cgaccgaggc gttgcattgt gtactgtact 360
 gcacccc 367

<210> 1887
 <211> 351
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-A10

<400> 1887

gggtcgacgg ggacgacatc cacaagttcc tacactttat tgatcgtctt gaggtccttg 60
 tggggtgttt caatgggtgga aggctacgtg ggatatgtgt gccactgctg cacacgttga 120
 acaagtccaa ctgtgtcgag aaacttatgg tacgagctgt tttctgttat atattttgtt 180
 cataaactct ttcttataca cagttttaca gctttgatct tcttgaaata gaaactgccc 240
 agttgtattg ttcttataca gatgcctgac cattgccggg tcagacttgc acttgggtcac 300
 aacatgatgt ttatgtcaac ctactccatt ccccttgag gtgaaaatat a 351

<210> 1888
 <211> 419
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-A6

<400> 1888
 gtacggtaga gaattccgc gtcgacggga tctacgacc catcaacgaa tcatatttct 60
 cgggtcaagat gttcgaggga gtcattgcaa catcttaca tgaagggtgac aagttcttca 120
 ttgatcccat gaagctgctg cccctttcac gcttctgcc gcagccaaag ggctctactc 180
 caagaggtgg ttgtcgcggt ggaagaggtg ctggtcgagg tggatttggg ggccgtgggtg 240
 gattccgtgg aagaggtgca ccaaggggtc gtggacctcc caggggtgga gggcgtgggtt 300
 tcagacgacg aggcagattc taggatgtag ttttaagttg gctgtttgtt gaaacacgat 360
 gttctacagt atccgttcag ctggaaacat tatgctaagt caactgtgag cgctctttc 419

<210> 1889
 <211> 374
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-A8

<400> 1889
 attccccggg cgacgggccg cgagatcaag ttgcttaggc tcctaagaca cctgatatt 60
 gtggaaataa aacatattct acttctccg tcgaggagag agttcaagga tatatacggt 120
 gttttcgaac tcatggagtc tgatttgcac caagttataa aggcgaatga tgacttgact 180
 ccagaacatt atcagttttt cttgtatcag ttgctccgag gattgaaata catacatata 240

gcttcttgca gcaaagtat ttcacgaga tctcaaacca aagaatatct tggctaattgc 300
 tgattgtaag ctcaaaatat gtgacttcgg tcttgcaagg gtagctataa gtgatactcc 360
 aaccgccata tttt 374

<210> 1890
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-A9
 <400> 1890

taccggtcct aaattcacgg gtcgactgtc cggacacaga agccttagca gctttcaaac 60
 acaacttccg attcaaattg ctcgccaggc acctcgtaa agaaaagcca agaacaattg 120
 ccgcattaac aagcctcatg accctctttt gcgcgggaga ggatagttgg ctggcacgat 180
 gcagtaccag cgacccaagt acatccgaag tcaggaattg aaacgggaaa ccatgacgca 240
 gcaaggacca gcgccggacc aagggaaaca gccgaagag cacggcagtc aaccctggat 300
 tcaaaagctc tcggcagaat cataaaaaac tacccttaa ggataacagg gacgagctat 360
 ctagcttaaa caaatcttg gacaagatat gccaaatcca cagtactccc ggtaagccta 420
 caaaccatac ccaacaagat tgttgg 446

<210> 1891
 <211> 447
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-B10
 <400> 1891

gggtcgacgg gaggcggcta cgggtgttgg cttacgaagc tcggatgact gtcgtctcag 60
 cttgttttgt aatcggtac gccggccgat acgcgtcagt tataagccca ttgagcttgt 120
 tgcttccgtg caaaacatgg aaagcccatg acccgtaaag aaactaacca atacgacgct 180
 tattaaatag agtatatata tatatatata aaaagagtat atatagaaaa aaactatagg 240
 ccgcttattg cgagcgagat agcctagcat cggtaaagc gcttccttga ttctgctcac 300
 tataaattag agcaattttt cattcttga aattgcggtg acattacata tataaataat 360

tatgatcagt ttaaataata aataagtga aactatcgca aaacagtga acattcacgt 420
gttaaaaagt tatagcatat atcgaat 447

<210> 1892
<211> 448
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-B2

<400> 1892

cctgcgcgta ccggtccatg aatcncgggt cgacggggag agggagtggg tgcggagcta 60
ggggtgttgg atggtgtagg agtgcgttgt gaggaaggaa aaatgtgctc aacaaacatg 120
acatgacgaa agacataaac gtgtccgggtg tgaaggtcga gacagcgata gcctttgtgc 180
tcgtcagaga agccgagaaa agcacatggg atagagcgtg gtgacaattt atttgcagaa 240
gtggcgtagg cattgggaaa acagagacgg ccgaaaacac gaaccgcgga gtagtcgggg 300
tgggaaagaa agaggaaata ataggggtga ttgttgggtt tagttttaga aggtcgaata 360
tttagaagga aggtggccat gtggagggct tcagcccaaa acttgagagg catagatgat 420
tgaatgagga gagtgcgaac tatatcat 448

<210> 1893
<211> 397
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-B3

<400> 1893

gggtcgacgg gacatgttca gataaaagag agagttgtct tgtgctcaca agcacactag 60
ggcagttgcc atgtaaaaga aagagttacc gtctgcttac gtgcacgcta gggcagttgc 120
catgtaccat gcaaaaacac atggcaattc gggtaaaaga gagttgccaat ctgcttacia 180
gcaaagctag ggcagttgcc atgtaccctg cagaaacaca tgtcaactga cagctttggg 240
tgtggcgagg agacgggctg gtgggcgaag tgataaacac ccacacacca gccccctctg 300
cgtgcgtgaa aactgatgtg tgggcgaatt gctaaacgcc cacacaacag cccccgtgtg 360
gtgaaaaaga acggtgggag accggatgaa tgccac 397

<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-B8

<400> 1896

gtaccggtac agaattcgcg ggtcgacggg cagggcttgg gcaaggttca tcagcatcac 60
ggaaggcgaa tggaaaccaa agctgaaatg gtttctagcc aaggtaagta attaagtagt 120
actagctagc tagctagctg ccatctcttt aattatcatg cttgattaat tattatctaa 180
tcaaattaaa ttccattctg gtaataaagg ccctgaagca ggcgcagggg actgatctgt 240
gtgcattctg catttgcgag aacattcgca tgatggcgtc cgaaaggagc agatctcaaa 300
gacaggaatg ggtacgcttg tcagaacact attcacaatt ttacaccat tattgatatc 360
tagtcacaca actaatacac atgcatattg atctccttaa tagttcaaag aggtgcgggg 420
caagctccta acaacgaagc gcgtagaagc act 453

<210> 1897
<211> 437
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-C1

<400> 1897

tacgggtcaat atttccgggt cgacgggagc tagcagtggc gctagggttt tgacgaggtg 60
gagaggtgga agaaggtttt cttgacggca ggggacatgt atttataaag aagtgtgcgg 120
cacagtgcaa ttacgcaggt acccctggct gttcacatct gaggggcatg tggcaagcac 180
gcaacatact cagagttgtc ccacgttccc acgcccgccca ggtttgtcgg atggttggtc 240
cggcttctcc ggatttcaac aataaggatg aatcatttaa aacaaactta atggttggtc 300
ctgtgtcttc tgctgacaag gatgcagaga agacatttga cagtttcaat agtatgcata 360
tgatttggac agatagagtt tgagatagaa agcatagaga gattanggtc cgatcacatt 420
cacttagttc aaaagtt 437

<210> 1898
<211> 232
<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-047-Q1-E1-C11

<400> 1898

gggtcgacgg ggtcaccatc ctgcgggtccg agaagggtcaa ggatgagatc gtcctcgacg 60

gcaacgacat cgagctcgtc tcccgtctcg ccgccctcat caaccagaaa tgccacgtca 120

agaacaagga tgtcaggaag ttcttgagcg gtatctactt cagcgacaag ggcgccatca 180

aggaggagta nattgcgaaa aaccgtccca ccaaaaccct tgtttctgcc tg 232

<210> 1899

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-C12

<400> 1899

gggtcgacgg gggtatctcc tcagaggagg agataaactt gttcaattgg catataccaa 60

atctggagta cgccaatgca ggattatctt caaggcttag ccttgcatte tgggaccagg 120

atgatccgta tgacatgggt ggggatcact gttcctgcc tgggtggcaac gggaggcttg 180

tgcaggccct ggcagagaat gtgcccattg ttacgagag gacagtgcac actatacggt 240

atggagggga tgggtgtgcag gtggttgta atggtggtca ggtgtatgaa ggggacatgg 300

cgctgtgcac tgtgccactt ggggttctga aaaatggggg tatcaagttt gttactgagc 360

tgccacaaag gaagcttgat agtatcaaga aactaggctt tgggttgta aac 413

<210> 1900

<211> 435

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-047-Q1-E1-C2

<400> 1900

accgggtccag aattcncggg tcgacgggag ctaacacgtc gcgatggctc cacgaataag 60

tcctttctct aggacatctg ccgtgacaaa ccacaacat atggctagta aaagagtta 120

taaaccatag agaagttgga atacagtagg tttaacacca atataaataa ataatgagtt 180
cattacagta ccttgaagtg gttttttggtt ttctttcgct aacggagctc acgagatttt 240
atgttaagtt ttgtgttggtg aagttttcaa gttttgggta aagatttgat ggattatgga 300
acaaggattg gcaagagcct aagcttgagg atgcccaagt caccccaagg taaaatacaa 360
gggcaccaa aagcctaagc ttggggattc cctggaaggc atcncctctt ttgtcttcgt 420
tcacgcgtaa cttta 435

<210> 1901
<211> 392
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-047-Q1-E1-C6

<400> 1901
attcgcgggt cgacggggtg taggtgcgtg ggtcttttga ggagcctcct actggattga 60
tactttggtt ctcaaaactg agggaaatac ttacgctact attgctgcat caccctctcc 120
tcttcgagga aaaccaacgc aagctcaaga ggtagcaaga aggatttctg gcgccgttgc 180
cggggaggtc ttcgctcaag tcaagacata ccaagtaccc atcacaaacc catctccctt 240
gcatttacat tatttgccat ttgcctctca ttttctctc cccacttca cccttgccgt 300
tttatttgcc ctctctttaa caatcttctt ctctttttc cgtttgcctt cccgttgcca 360
tggccgaatc aaaaagaact aagggccctt tc 392

<210> 1902
<211> 409
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-047-Q1-E1-C7

<400> 1902
ggtaccggtg ccagaattcc cggtgcgacg gggaggaaga gcccgaggag gagctaggaa 60
ctgaatatct ggtgcagccg cttggccgtg ctgaagacga agagcattcc agtgacttcg 120
agccagaaga aaatggtgat ggtgctgagg acgaggagat tgaggatgac gatgctgagg 180
atggtgagga tcctgtcaag gcgcaatcct catcaaagag gaagaggtct ggtggggagg 240

atgaagatga tgacgacggt gatgatgatg gtgatgatga tgagaagcct ccatcaaagc 300
gatagtcaat ttgttcgtgc tgatctgtga tcttctctgc ttgggccaag aaggaaaata 360
atcctcatgg agaggattgt tggtaaagtc tgtagcttta ggacatctg 409

<210> 1903
<211> 418
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-D1
<400> 1903

acggtcctag aattccgggt cgacggggga aacaatgctt cttcagagaa ctcttgatgc 60
aatggttgat gtcgtttatt gtccgagatg tcaaactgct tgcttgaag atgcaggtga 120
tgaagccgtg tgtccaagtt gtttgttcag cttctgcgca cttttagag ggcgacgtca 180
tgttgggggtt gaatgtttat ctgcagaaga aaaacttcaa attttggagg aacgtcaaaa 240
gtctgcacga acaaaggag acatccagaa gcttatggat gaagtatgca gtatcaagga 300
aatgttgaag gatgcaaagc agtgcccgca ttgcaagatg gctatatcta agattgaggg 360
atgcaataag atgacctgtt ggaactgcgg tggattntc tgctaccaat gcaacgct 418

<210> 1904
<211> 463
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-047-Q1-E1-D10
<400> 1904

cggtcctaga atcccgggtc gacgggttat gcacaaaaat gcatcgaaaa ctcatataat 60
gcataaaaaat gtccaaacga accccgaaaa atcacaaaaa atcacacaac actcctgttg 120
ttctatgttg acacgagaaa aaaaaattga aagcaataag aggcaatgga tatcggtccc 180
tccccaaagc tggggcggtc cctatcgaaa accatcatgc ttcttgtgag aagctccggt 240
ttgtgagaag catataccca aacctgcccc aaatgggaca aaacttttgt aatggcatgt 300
tgatgctgct ccatgatagc atgccaagtt tcatgaattt tagacgagtt ttggatttac 360
tagaatttaa aaaacaggca tctcaatgtt ttgccggcaa tcaacggtgc cctgggtgttt 420

gaaattcatt cccatttctt gcatgggaac taagcatgca ccg

463

<210> 1905
<211> 257
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-D11

<400> 1905

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tcgccgccgt ctggatccaa gcaggttatt gtgtgaagt ccacgtgtcc acatggcttc 120
agcggcgcaa gatttccagc cccggacatt ctccatcana ctgtggccac cgagtgaaag 180
cactcgtctg atgcctgtaa aaaaggataa caagaaactg tcctccgaat tcaacctttc 240
ccccagtta tggcctt 257

<210> 1906
<211> 443
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-D12

<400> 1906

ccggtcaaga aatccccgggt cgacggggtc accatcctgc ggtccgagaa ggtcaaggac 60
gagatcgtcc tcaacggcaa cgacatcgac ctgctctccc gtcgccgc cctcatcaac 120
cagaaatgcc atgtcaagaa caaggatata angaagttct tggacggcat ctacgtcagc 180
gacaagggcg ccatcaagga ggagtagaga gccggaaacc gtcccgcca ccagaagccg 240
tgtttctgcc tgccgtgttt gtttcatcgt gtntgtgtct gtctgtcgtc gtcgtcttcg 300
tgattttgaa ctttctctag actgaatttt gtagcggagt taaattttta aggatgtgcc 360
gtggaacatg ctatctttaa tgttatcctg catatcgtcg ccgccgcgag aaccggtgcc 420
acgcttatct acccctaaag gct 443

<210> 1907
<211> 461

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-047-Q1-E1-D2
 <400> 1907
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 ctgcccgtct tcccctgagc tccttcgccc gcgaacgccc aaagccccgc atggagatcc 120
 tccaacaagg cactatgttg atgttcccgg ggatggatct tacgaaaatg gatcctccaa 180
 ctcttaccct tcttgaggca gcttgttttg taatgtttgc tatgcatttc acagtacagc 240
 tggatcacca gcatcttttc tattggaaaa atcccaaaga gcagaaggct atactcatta 300
 tagtgctgat gctccggtta tatgtataaa cttcctttgc tggctttctg gatattaagg 360
 gaagcaaaac gttttttaca tgtttgaggt ctgttaaaga atgctatgaa gcaactggta 420
 ttgctaagct tctggcattg atgtacagct acttaaatat a 461

<210> 1908
 <211> 384
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-047-Q1-E1-D3
 <400> 1908
 gggctcgacgg ggaagaagac caaggccgag aagcggccgc ccaagtccaa ggagggcggc 60
 gccgacaaga agaagaagaa ggccaagaag agcgtggaga cgtacaagat ctacatcttc 120
 aaggtgctga agcaggtgca cccggacatc ggcatctcct ccaaggccat gtccatcatg 180
 aactccttca tcaacgacat ctctgagaag ctggccggcg agtcggccaa gctagccccg 240
 tacaacaaga agcccacat cagtcctcgg gagatccaga cctccgtccg cctcgtcttc 300
 cccggggagc tcgccaagca cgccgtctcc gagggcacca aggccgtcac caagttcacc 360
 tcctcttaga tacgccgttc cctg 384

<210> 1909
 <211> 442
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-047-Q1-E1-D5

<400> 1909

gtaccggtac cagaattcgc gggtcgacgg gaaactgtgt ggttggtgcgc tgctgcgtgg 60
gataaggcgg atggataact ggcgcgtggg gcctaggaca cgtgtcgatc gctagacgcg 120
gcttacaatc gcgtgagatc agtcggttgg aaagaagcgt tttccgaatt ttatagatat 180
tggttcattt agaaaataacc atcttattct gccatattca ttataatttt tatggcatga 240
gcatctacaa aaatgctcag gtagtatgcc gttgaacaac atttttttgt tgtgaacctt 300
gttacatgic tcatttgtga tttctgagag gttggtaggc aagatctgaa aaaaaaaaaac 360
ttctatactg tttttcttgc agtttcttca cctggttcac tgatacagag cacaagagcc 420
ttgccggatg ggggtgcaaga tg 442

<210> 1910

<211> 432

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-D7

<400> 1910

gtaccggtac agaattcgcg ggtcgcgagg tctcaataag tattttattg aaaaaccggt 60
cgtgacagtg ggtctcattc aatttttaaag ccgagggctc ctggaaaagg gaaaggggtg 120
gtcctggggg ggggtttttg tggtgggatc gtgtgcgaga gataacatgc cagataatcc 180
agacaatcac atttctcccc cacatatggg ctcgatttga aggagttcag attatccaaa 240
tagttgaatt ttggagagcc tgcaaggcgc ccgtttgacg tcctagcgca tctggatgta 300
tgaggggagaa agacgttttg accttgggtga tgaccttaat tatttgtttg attcatttat 360
atgtattgta gctcgtagca acgcacgggc gttctcctag tataacttggg attcaagata 420
tgtgaaactt tc 432

<210> 1911

<211> 413

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-D8

<400> 1911

gtaccggtac agaatccgc gggcgacgg ggccactcac agtgatgacc atagtttgag 60
gagttcatgt attcaccatg tgttaatgct ttggctctgg actctattaa aaggaggcct 120
taatatccct tagtttccgc taggagcccg ctgccacggg agggtaggac aaaagatgtc 180
atgcaagtgc tttccataa gcacgtatga ctatattcgg aatacatgcc tacattacat 240
tgatgaattg gagctagttc tgtgtcacc tatgttatgg ctgttacatg atgaaccaca 300
tccggcataa ttctctatca ctgatccaat gtgtgcgagc tttccatata ttgttcttcg 360
cttatttact tttctattgc tattgttgtc atcactataa aacaccaaaa ata 413

<210> 1912
<211> 446
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-D9
<400> 1912

gggctgacgg gttgctataa aatgatagta aagcatcaa gaatgataat atagcagcat 60
gaatacttca taaattatcg atacgttga gacgtatcag catccccaag cttaattcct 120
actcgtctc gagtaggtaa atgataaaag aaataattta tgaagtgtga atgctagcaa 180
agtgcataag tttgatcaat gacaatttca atcacttttc cttagcttcat aacaacaatt 240
ctttcctata aaatttcaca tgttaaagta gcaaccaatt cacatgttaa ggttcanaca 300
acaaattctc ttaaaaaccc acaacctatg ttatcagttc acaagcaatt gtaattcaat 360
ttattcaacg gaatttaact aagagctcca catactcaac catcatatag ttttctagga 420
ttgctaacac tcaccgata cacatg 446

<210> 1913
<211> 445
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-047-Q1-E1-E10
<400> 1913

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ttcggccttc atccacggcg atgatgacgt tcccttcgac cacggcgacg tatgatgatt 120
 tgagtgactt gtgccaccat attgagagtg agagtgactt caccactagc cccatatttg 180
 atgtgttgcc atgattccca tgtaaggaga gccacaaccc caccacttga gtgagatgag 240
 tgactccacc atatgtgaca ttgagtgcac ctaccttgac ggagtgagtg aaccaccaca 300
 tagagagagt gaggtagctg atagggcatg tgaggccact atgatttcta acaacttaat 360
 ctctacttct attgtgtcct ctcatcttgg gctaggtccc atgtatgatg acacgccgat 420
 tcacgacgac ttcgccctcc atttg 445

<210> 1914
 <211> 197
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-E11
 <400> 1914

gggtcgacgg gtgaacatgg tgcagcactg cctgcccagg gaggtggtga acctgatcgc 60
 gtgccatggc cctgagctgg tggagcggca cgacgtgttc ggcaagtgga acgcgcgcct 120
 caccatggcc ggcttcaggc cgtcgccgct cagctcgctg gtgaacgcca tcatcagcac 180
 gctgctgcac agctact 197

<210> 1915
 <211> 415
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-E12
 <400> 1915

ccgggtcgac cttctggtgg cagagcttct gcggattctt catcatcatt atattcgctt 60
 tctctgaacc tttcagcacg acatgggcca tgctgaacga atcccctttc tcaagcgcga 120
 attgccattc attgggtgtg atgtggaacc agtcctagtt tgaagtcacg gtcgccttca 180
 cctccacata ctctgcggcg ccaccctcgg gagtgatgac aatgtcatag ggaagccccg 240
 attccttctc ttcggttcacc cacttgacat tgctaggtcc cagctgcccc gcaaggtatt 300
 ggtgtaccgc agcttcacca agcctgccgg ttcttgaccg ctcatctggc ttttgaactg 360

tggtttaca aggtgtgcca gctcctagct cgctttcatc ttctgcaaca tcagc 415

<210> 1916
<211> 441
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-E2

<400> 1916

cggtccagaa ttccccgggtc gacggggagg aagagcccga ggaggagcta ggaactgaat 60
atctggtgca gccgcttggc cgtgctgaag acgaagagca ttccagtgcac ttcgagccag 120
aagaaaatgg tgatggtgct gaggacgagg agattgagga tgacgatgct gaggatggtg 180
aggatcctgt caaggcgcaa tcctcatcaa agaggaagag gtctggtggg gaggatgaag 240
atgatgacga cggtgatgat gatggtgatg atgatgagaa gcctccatca aagcgatagt 300
caatttggtc gtgctgatct gtgatcttct ctgcttgggc caagaaggaa aataatcctc 360
atggagagga ttgttggtaa atgctgtanc tttaggacat ctgtggtagg tgtagcagct 420
caaacttgag tctaaccatg t 441

<210> 1917
<211> 450
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-E3

<400> 1917

acggtccaga attcncgggt cgacgggcag gatcatgatg ctgtcaagag aacttatttt 60
cctggactta aaaatcttag tactaaaaac gtgcgaccaa tagtggtcgt attgaactac 120
ggtcacatct atttaggaaa gatggttaaca tttttactat ttgtcctcgg tgcacttttt 180
gcatacatta tttttaagct aaacttcatt gctaattatg ttactatacg atgttcttca 240
acagggactc tcgatgatag ttgtgcctta gtggatcgat actaaaggtc acatgtcaat 300
ggttagatta cgaccaagac atcctacatt gcacatgagt gcatttagga tttctaaaac 360
cgaggaatgc ttaatagtga aagactagag cagaattgtg aatgatcgca gagaagtact 420

aaggggcaac aatcaaaagc ccaacccaag

450

<210> 1918
<211> 434
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-E4

<400> 1918

tacggtccag aattccccggg tcgacgggac cgcagattgt gtgggggtgcg aggaagagga 60
ggacgagaag cgagacactg cccattgatg ccgccacctt gctgccagga gaaggagaga 120
agaggatgcg gggacctgga ccagatgcac aggaggacga ggctgttcaa gcggttgaag 180
ccgctccagc aaagcggggt caccggttca accccaagta cgatgcgacc ctgtggatca 240
cctgctgagg tgggtctgaga agccacatcg gcgccgggca cactgacaaa acaatggttg 300
ttcgactttg gcaacatcaa tgcacatagt atcgtttcac ctatgacccc cacaactcaa 360
acacattaca catgtacacc atagatgtcc agggaggtaa agtccctttt tttttaacca 420
tttcaactgt tggt 434

<210> 1919
<211> 451
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-E5

<400> 1919

gtaccggtac cagaattcgc gggctcgacgg gaaacaatat gggggttaac ccatgaatgg 60
gcataagatt atctctcgag ttgaacatat cgaatacatc aagagtaagg tacgaaggta 120
caataagagg ttccaagtgg atagatagtt gctcgaagtc tgaaccagag tgagaaaggg 180
tttcagagca gcgagagtaa gtattgcgtc tgttaccaga atatagcatt aggaaggtgg 240
cccgtgaatt aaatacgaag ccaagcgcga ggaataactt cgacaacagg gggatatagga 300
gagtcagggtt ttgatcctgt ggaactgtgg gttatgggcc caccatgtgg gttagaagta 360
ggaagggcgg aggcgtcttg cgtgatcatg caagcagtat gtcanggggg tagcctgtcg 420
attatgtcgg cgacaacgtc cataccaaga g 451

<210> 1920
 <211> 397
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-E6

<400> 1920

attcgcggt cgacggggaa gtcggccgcc aaggaggcg gcgacaagaa gggcaagaag 60
 aaggccaaga agagcgtgga gacgtacaag atctacatct tcaagggtgct gaagcaggtg 120
 caccgacaca tcggcatctc ctccaaggcc atgtccatca tgaactcctt catcaacgac 180
 atcttcgaga agctcgccgg cgaggtcgcc aagctggcgc ggtacaacaa gaagccaacc 240
 atcacgtccc gggagatcca gacctcgtc cgctcgacc tccccggcga gctcgccaag 300
 cagcgcgtct ccgagggcac caaggctgtc accaagtcca cctcctctta ggctgttcgt 360
 cttcctgtgt ctcgtaantta gctgttcggg tgtgttt 397

<210> 1921
 <211> 398
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-E7

<400> 1921

gtaccgggtat agaattcccg ggtcgacggg tttgggtaca accttgggtt tcttcactag 60
 agcaccaact gatttgccgt ttcatagaat atcccttctt gcccttgccc ttcttgaaac 120
 tagtggtttc actaaccatc aacaattgat gtccttctt gatttctact ttcgcggtat 180
 caaacatcgc gaatatttca aggatcatca tatctatccc tgatatgtta tagttcatca 240
 cgaagctcta gtagcttggg gcaatgactt tggagaaaca tcaactatctc atctggaaga 300
 ttaactccca ctcgattcaa ttgattctta taccagaca atctgagtag aagctcaacg 360
 attgagcttt tctcccttag tttgtaggct aagaaaat 398

<210> 1922
 <211> 388
 <212> DNA

[illegible]

<400> 1922

<210> 1923

<212> DNA

<223> unsure at all n locations

<400> 1923

<210> 1924

<212> DNA

<223> unsure at all n locations

875

<400> 1924

accggtccag aattcncggg tcgactggta ttgaggataa agaattgaga agaacactgc 60
agtcacttgc ttgtggcaaa gttagggttc tccaaaagac accaaaagga cgagatatag 120
atgataagga cgaattcgta tttaatgaag attttagtgc tcccctttat cgcataaagg 180
tgaatgcaat tcagatgaag gaaacagtag aagaaaacac aagcaccact gagagagtat 240
ttcaagatcg tcagtatcag gttgatgcag ccatagttcg aattatgaag acgaggaaaa 300
ctctcagcca cacccttcta ataactgagc tttccagca gctcaagttc ccgattaagc 360
cagcggatat gaagaagaga atagagagcc taatcgacag ggagtacct 409

<210> 1925

<211> 361

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-047-Q1-E1-F11

<400> 1925

cggtccagaa tatcncgggt cgacgggatg tgccactttg gggtcacgac tagccatgtc 60
agccccgggt ccttatcata tggatgctag tgacactatc atatacgtgt gccaaaagac 120
gcaaacggtc ccgggcaaag gtaaggcgac acccgtggga ataccgtgcg tgaggccgca 180
aagtgatatg aggtgttaca tgctagatcg atgtggcatt gagtcagggt cctgacattg 240
aattggaagc atcatttgtg gcttgaattt tcctgacggc cttctaaatt ttcattgata 300
gagtagtaat ctccggggcc gggttatatt tccctccaat gacccggagt tcttgaatgc 360
a 361

<210> 1926

<211> 370

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-F5

<400> 1926

taccggtaca agaattcccg ggctcgacggg gtcaggaaga tttctcgtgt taatctcatg 60
ggctccaagt cgcaagctat tcctactgcc acagaaaagg ttatcgact ggaagcgtgc 120

ttcagccgca gaactaatgt ttagtaatgt cgatgtagat ctactcctca tccttgccat 180
 agtggttcac catacagagg ctgtttggta ccagtttctg gaactcattt ttgtttgact 240
 gatacatctt ggtcaatata agcttctgga attaacgtat atctgtataa ttcctagtta 300
 ctatttttgt cgagctgtaa ttccttttgt tttttctaca ttacggtggt actacttgat 360
 gaaaacttac 370

<210> 1927
 <211> 403
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-F6
 <400> 1927

accggtcgta cagaattccc gggtcgacgg gacaacggat gcctccaact aacaagagtc 60
 ccgggggaggt tttgtttcaa gttattttga ttgatttgc ataaagcatg ggactgggca 120
 tcccggtgac cagccatttt ctctgtagtg aggagcggag tccactcctc ttgagaataa 180
 cccacctagc atggaagata cagacaatcc tagttgatac atgagctatt cgagcatata 240
 aacagaaatg tttatttgaa ggttttagagt ttggcacata caaatttact tggaacggca 300
 ggtagatacc gtatatagac aggtatggtg gactcatatg gaataacttt ggggtttatg 360
 gaattggatg cacaagcagt attcccgtt agtacaagtg aag 403

<210> 1928
 <211> 406
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-047-Q1-E1-F7
 <400> 1928

gtaccggact agaattcgcg gggtcgacgg caattagatt tgtttttagat tcatcttcag 60
 catgaggaaa gaaagaaaga aaggacgaaa gaaagaaaga aaagatgcgc acgcacgctt 120
 gaggtcggcg acggtggtgg cggaggcggg gaatgagacg gcgaggcggg tgcccaggct 180
 cgtctccagg aacaccgtcg ccacctccat tcgatccctt cggtgccgga ggcggaggag 240
 gcggagcggc gtcccgaat ggaaagctct cctctgcttt ggggtttctc caggagcaag 300

aggccaagag cagaggaggg gaggccagcg gaccacgtga cgtgacggcg ctccctctcc 360
tctcctctcc tctccggtca cactacttct agactcttgt tgactg 406

<210> 1929
<211> 433
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-F8

<400> 1929

attccccgggt cgacggggcac atatgaagat aaggaagaaa gagatgttta tttgctgtcc 60
aaaaagttct ctcacgtcac ttttggtcca agagaagata gagtccaagt ctctcacgtt 120
ctggattcag attcggactg cacagacata cctgactcaa aacgcacaca agtttttcat 180
acggactcca aattgggtga ttcttttttt gttggaaact agattttgtc cactttccaa 240
cccaattgga atcacattca aattcgtcg gagcgttgag ttgtggacga aacaatctga 300
tgctgcagca gaatccgagt caaactacaa gtccaaagggt gttacatcac ctccacttgg 360
gccattggc cttgtacgac ctgatttag ttttaggctg ccttgggacg tcctcccaac 420
tccttggcgg caa 433

<210> 1930
<211> 305
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-047-Q1-E1-F9

<400> 1930

ggtecagaaa tencgggtcg acgggtggaa cgatgaacta atcatattta caaaaacaag 60
agaggctcgag ttcatatcag cttttctcat ctcagccagt ccatcatata tcgttaaaat 120
tgcctttcac ttgcatgacc gaacgatgcg gataataata atagtgcaca tgcattggac 180
taagctggaa tctgtaagca ttcaataaac aggagaagac aaggcaatat gggttctttt 240
tggtttttct cctatcgacc cctaaaaaaaa aaaaaaaaaa aaagaaaaaa aaaaaaagcg 300
gccgc 305

<210> 1931
 <211> 362
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-G1
 <400> 1931

accggtccat gattcncggg tcgacgggat ctacatgtga agtggagtac atggcagcct 60
 cggaggcagc acatgaagct atttgggtga aggagttcat caccgaccta ggagtcatac 120
 ccaatgcgtc ggggccgatc aaactcttct gtgacaacac tggagctatt gcccttgcca 180
 aggagcccag gtttcacaag aagaccaggc acatcaagcg ttctttcaac tccatccgtg 240
 aaaatgttca agatggagac atagatattt gcaaagtaca tacggatcta attgtcgcag 300
 atccgttgac taaacctctc tcgcgagcaa aacatgatca acaccagaac tctatgggtg 360
 gg 362

<210> 1932
 <211> 449
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-G2
 <400> 1932

cgggtccagaa ttncggggtc gacgggttcc tatatataat tctttacctc cggaccattc 60
 cggacctcct cttgacgtcc gggatctcat acgggactcc gagcaacttt cgggttaccg 120
 catactaata tctctataac cctagcgtca ccgaacctta agtgtgtaga ccctacgggt 180
 tcgggagaca tgcagacatg accgagatga ctctccggtc aataaccaat agcgggatct 240
 agatacccat gttgggtccc acatgttcca cgatgatctc atcggatgaa ccacgatgtc 300
 aaggacttaa tcaatcccta tacaattccc tttgtctatc ggtacgacac ttgcccagaga 360
 ttcgatcgtc ggtatcccga taccttggtc aatctcgnnt acggtaagtc tctttgctcg 420
 ttccataaca catcatcccg tgatcagct 449

<210> 1933

<211> 419
 <212> DNA
 <213> *Triticum aestivum*

 <223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-G3

 <400> 1933

cgggtccagaa ttncnccgggtc gacggggagcc aagaagacca aggccgagaa gcggcccgccg 60
 gcgtccaagg agggcggcgga gaagaagggg aagaagaagt ccaagaagag cgtggagacg 120
 tacaagatct acatcttcaa ggtgctgaag caggtgcacc cggacatcgg catctcctcc 180
 aaggccatgt ccatcatgaa ctcttctatc aacgacattt tcgagaagct cgccggcgag 240
 tcggccaagc ttgcgaggta caacaagaag cccaccatca cgtcccggga gatccagacc 300
 tccgtccgcc tcgtctctcc cggcgagctc gccaaagcatg ccgtctccga gggcaccaag 360
 gctgtcacca agttcacctc ctcttaggct angatggttt tctgtaatan tcagctgtt 419

<210> 1934
 <211> 427
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-047-Q1-E1-G4

 <400> 1934

gggtcgacgg gcaataatat caagtttctt ctttatgtgc tcaaagtttc gaagctatgc 60
 ttgttttgcc ttctatgct agttgattat tgttcctata agttgttttc tcacaaaatc 120
 cctatgcata ggaagtgggt tagacttaaa ttttctagtc atattcttca tgatgctctc 180
 tttatgttac aattcctatc ttttatgtga gcatcattga aattatcatg cctagctagg 240
 ggcgttaaac gatagcgctt gttgggaggc aaccacactt tatttttgtc ccttgatttt 300
 tttctcctgt ttattaataa ataatttctc tagcctctgt tatgattgag tttttatggt 360
 ttaattagtg tttgtgcaa gtagaaccgt tgggaagact tggggaaagt cttgttgatc 420
 ttgctgt 427

<210> 1935
 <211> 425
 <212> DNA
 <213> *Triticum aestivum*

<223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-G5

<400> 1935

gtaccggacc agaattcccg ggtcgacggg ggtcaccagg ggcttccgct acaagatgcg 60
 ctctgtgtat gctcacttcc ccatcaacgc ctccatcacc gccgccaacc gcggcatcga 120
 gatcaggaac ttctctggcg agaagaagggt gaggaagggtg gacatgctcg acgggggtcac 180
 catcctgcgg tccgagaagg tcaaggacga gatcgctctc gacggcaacg acatcgagct 240
 cgtctcccg ctcgcccgc tcataacca gaaatgccat gtcaagaaca aggatatcag 300
 gaagttcttg gacggcatct acgtcagcga caagggcgcc atcaaggacg agtagagagc 360
 cggaaccgt cncgcccacc agaagccgtg tttctgctg ccgtgtntgt ttcacgtgt 420
 ttgtg 425

<210> 1936
 <211> 422
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-G6

<400> 1936

cggtcgagaa gtattcgcg gtcgacggg acgaaaggat cgtagttca tcgaaagtag 60
 ttgttttctt cactggtacg ttaaataaag agttttgttt cgtagatata caatttaaaa 120
 tgattgttat ggagagaata agaaaaccac tccattatat attagtagta tacacgagta 180
 ctatatggac gcagcttcat tgacttagtg cacttgctt tgggtgtatg ataggtgggc 240
 ccaaaatgtg gctggccac ctgtcataca accaaaggca ggtgcagtta aggtaccgga 300
 gctcagtcgg taatacacta tatatgcagt aactatata agatggagcc tcagcgcttg 360
 ttcgctaggg ttgcaactct ccacactctc accgtactat acacgctgga ggctcagtgt 420
 tc 422

<210> 1937
 <211> 396
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-G9

<400> 1937

gggccagaaa tcncgggtcg acgggacctt caaactgctc aggcattcaa aaaagatgac 60
 cttctcttct ttggtcagag cgtacctggc acgaccttga aaccattccg gatgccggtc 120
 atcagggtct ttc aaacgtt gctggctctg cctgtcttcc tttgtatcat ttgtcttccc 180
 atacacgccc aagaagctta tgagggtcac gcaaataattc ttcttaacgt gcatcacgtc 240
 gattgcagag cggacttcta agactttcca atattctagc tcccagaata tagatttctt 300
 cttccacatg gctgcgtgcc cgtcagctcc cttcggaact gattgtccgc caggaacctt 360
 tcgaaagatg actttcaa at ccttgaacat atcaaa 396

<210> 1938
 <211> 448
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-H12

<400> 1938

aattcccggg tcgacgggta ttttgctagt atacatgtta gcagtacata caaggtggtg 60
 aattcaaacc gcacgcggtc gattaggaag aaggtgaatt caacaaggcg gaccgggtca 120
 aactcatgga accacaactc ggagtcagat tccgagatag accggatata cgccatatga 180
 gggatgatctc cgggtcttcta tggatcttca gtgttttcgg cggcgccaca cgacacggat 240
 gtaaaaagga aggtgggatg gcactcaata tgaacagctt tcaccctcca ggtgccaagg 300
 gttttaccgt atacattcca ataagctggg gttcctggat cggcaagagg agccaggacg 360
 cgacggtcgt gttgtataca tcttctacag atagattgtg atcatcagaa tatgcatgca 420
 gcctgtgctg tgctccctat gcatggct 448

<210> 1939
 <211> 430
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-047-Q1-E1-H3

<400> 1939

accggtccag aattcncggg tcgacgggcg tgagaggccg gattcgggttc tatattggag 60
ggggagctcc ggtctatgca gaggaggcag ccagcagcg gtctgatctg gccagggcag 120
tgctgacggt tggaggatga gatcgatcca gaggaataatt aatcgaaatg agaccgaaaa 180
tatattgatc gtccaagacc gatctgaaga aaccgataga gagaggagga cgagtcgagg 240
tgtctggaat aaactctaaa ccttgactct tgataccatg ctagaggagc aacttgattg 300
tactaaacct tgactcttga taccatgcta gaggagcaac ttgattgtat taccatagcc 360
catggggaga atatatggta caagagactt ggggtacacg taaggaaacc tagaccaatg 420
agtacatata 430

<210> 1940

<211> 280

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-H5

<400> 1940

taccggtacc agaattcccg ggtcgacggg gacgtcgaag acagcggcga cttcgtgtgc 60
gcgttgtgac gagcaggcgt ggcgggtccc cttgggtggtg tggcctttgt gtttgtaatg 120
tgttcatcct tctgttgtgt cgtttgtttc agagggttgc gctgtgctgt tgtatgatta 180
catctgtttt ctgtaaccgt tggtggtagt gacgctgtgg ataaaatata agtataacta 240
cattccata tgtgttttgt gtctcagct ggattcaatt 280

<210> 1941

<211> 471

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-H7

<400> 1941

ggtaccggta aagaattcgg ggtcgacgg gttccataaa tcatgataaa tgtttattat 60
tcatgctaga attgtattaa ccggaactt agtacatgtg tgaatacata gacaaacata 120
gtgtccctag tatgcctcta cttgactagc tcgttaatca aagatgggta agtttcctag 180

ccatagacat gtgttgtcat tttatgaatg agatcacatc attagataat gatgtgatgg 240
acaagaccta tccgttagct tagcataatg atcgtttagt ttttctgcta ttgctttctt 300
cgtgacttat gcatgttcct cagactatga gattatgcaa ctctcgaata ccggaggaac 360
accttgtgtt ctatcaaacg tcacaaggta actgggtgat tataaagatg ctctataggt 420
gtcttcggtg gtgtttgttg agttggcata gatcgagatt aggatttgtc a 471

<210> 1942
<211> 259
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-047-Q1-E1-H9

<400> 1942

gggtcgacgg ggtaccttta atagcctttg ttgacagtgg agctcagtca accatcatat 60
caaaagactg cgctgaacgt tgtgggttac tcaagcacct tgatcaacgt taaaaacggg 120
ttgctaattg tgttgggtcaa actgagatac atggaacaat acatgtatca gctacaaaca 180
tatgccatgc tttctaacc cgtaccttca gagtattgga tgatccaaat atggaaatcc 240
ttttcggact tgagatgct 259

<210> 1943
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E1-A10

<400> 1943

gggtcgacgg gctctcatga cttcacttat attattttga gagtctttta taacatcatg 60
gtatttgcta tgatcataaa gttggctcta gaatgatgag catccaagtt gggattaat 120
aaaaactatc atagaaagtg aattggatgc tatgatcaat ttgatgcttg ataattgttt 180
tgagatatgg aggtagtgat attaaagtca tgctagtgg gtgattatga atttaaagaa 240
tgcttgtgtt gaagcttgtg attcccgtag catgcacgta tgggaaccg cattgtgatg 300
aagttggagc acaattttac ttagtgattg tcttccttat gagtgggtgat cggggacgag 360
tgatgggtatt ttctaccaa tctatcccct aagagcatgc gcctagtact tttgtttttg 420

atga

424

<210> 1944
<211> 425
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-048-Q1-E1-A12

<400> 1944

cgggtcgacc ggcgcaagtt ttcgggtcat ggctgactat ccacgtccga gtccaccttc 60
agatcgtaga gctgttgtgc tgtttaactg aactttcctt gtcaacaaac aacaggtctc 120
ttgggacttt cccttgctgt ggagtactag tcgaaacttc ttactcttcc ctttcccttt 180
tttttccaat ccaatcctca atactcacgg ataaccaacc tggccgtagc tttaggtgag 240
atgtagcaaa agtactactt ggtttaacac agtatatcag acaaaatagc agatcgcttc 300
ttctcgtaac ttgccgcaat gcctgatcat ctaaaaactt gaggagacta ttaatcttgc 360
cttggtttct aatgacagaa attgaccggt attcgacgga tcatatgggc gtanacaacgc 420
tcaac 425

<210> 1945
<211> 387
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-048-Q1-E1-A9

<400> 1945

taccggtcca gaattcncgg gtcgacgacc tcaacggaga ccagcaccac tgctaactca 60
atgatggttg ctatctctca caatatatat attactttta tatgtgtcaa ctttaagggt 120
tatatgtttg ggctgtgctt ttgtgatatt ttggactgtc agtgctttga ctgattttta 180
ccatctcaat gtttggcatt catgtagggt ttagcattac ttctgcgctc gtggtatggt 240
accttgccat gtcgcatcat tagtttgtct tgtatgtggt gtttgtccat ctgctgaggt 300
gtatacttat tactcgtttt gtctgcgcct tttcttcatt gagtttacct agtgatgctg 360
ttctgttgcc ctctatgctg ttgtttg 387

<210> 1946
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E1-B12

<400> 1946

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gggccagaat acccggttcg acgggggttt tgatttcttt cactaacgga gcttataaga 60
tttctgttg agttttgtgt tgtgaagttt tcaagttttg ggtagagatt ttttgacta 120
tggaataagg agtggcacga gcataagctt ggtgatgccc atggaacccc aagatattca 180
aggatagcca aaagcctaag cttggggatg ccccgggcat cccctctttc gtcttcgttc 240
attggttaact ttacttggag ctatattttt attcgccaca tgatatgtgt tttgcttga 300
gcgtcgtgta ttatattagt ctttgctttt tagtttacca caatcatcct tgctgtacac 360
accttttttag agaagcctat ttgattagaa ttgctagaa tactctatgt gcttcactta 420
gatcttttga gcttaataga ttttt 445

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<210> 1947
 <211> 415
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-048-Q1-E1-B9

<400> 1947

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tgatgtgcgg caaactccac cttttccgca ttcatgcac ctgctgtggt caactctcta 120
gctgtcttgt ggagccaatc atctactact atcggtcggg tgctactgga aaacaccggt 180
ggattcagcc taagaaaacg ggctaagtga tcaatagggtg gtggtggtgg tgggttgttg 240
ttgttggtat tcccttggtt ctaattctgg actagtaact gcatcaatgt gttctgctgc 300
tggattaact gagtgaagtc cgggtggaag gtaaatccgg ggtcacgtct cggaggcatc 360
tgaagggtta gaaaagatga gatttaagaa tagagggggc ctaaagagaa aacac 415

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<210> 1948
 <211> 396

<212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-048-Q1-E1-C11
 <400> 1948
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 acccgaacct aaaagatttc aaaaaccata attcatcccg gaataaaatt tttgtaaaat 120
 catcaacaca ttcaaaccat gagtagggca cctacgtagc attagtttca tcctctcaca 180
 agcttggtgca acatgttcat gatcaggttg tttaaagttc ataatatcgt ttctaagaga 240
 gatgatctta gcggggaggaa aatacttaga gataaaagca tctttgcact tgttccatga 300
 atcaatacta tttttaggca aagacgaaaa ccaagtttta gcacgatctc taagtgaaaa 360
 aggaaatagc ttcaatttaa cgatatcatt atcgac 396

<210> 1949
 <211> 416
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-048-Q1-E1-C9
 <400> 1949
 ggggtcgaggg ggatccataa tatatgagac tgtaagggtg gttctcttcc agtatgttat 60
 catggttgag attaggacta atttttagta caagagaaga atgctatggt ggtggttggt 120
 ctcaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 240
 aaaaaaaaaa agggcccctc aaaaggttca aaccttattt tgccataaag gcaaattaaa 300
 aaccttcaa aagggaaccc aaaattaatt taatgggcca tcttttaaaa atgtcgtaat 360
 gggaaaaacc ctgaggtacc caaagtaaac ccccttgaaa aaaatcccct ttttac 416

<210> 1950
 <211> 418
 <212> DNA
 <213> *Triticum aestivum*
 <223> Clone ID: LIB103-048-Q1-E1-D9
 <400> 1950

cgggtcgacc gggaagaaca caaggcggag aagcggggcg cggcgtccaa ggaggccggc 60
 ggcgagggga agcagcgggg caggaagaag ggcagcaagg ccaagaagg cgtggagacg 120
 tacaagatct acatcttcaa ggtgctcaag caggtgcacc cgcacgtggg catctcctcc 180
 aaggccatgt ccatcatgaa ctcttcatc aacgacatct tcgagaagct cgccggcgag 240
 tccgccaagc tggcgaggta caaçaagaag cccaccatca cgtcccggga gatccagacc 300
 tccgtccgcc tcgtcctccc cggcgagctc gccaaacacg ccgtctccga gggcaccaag 360
 gccgtcacca agttcacctc atcctaagct tcacgtcgt ccttttaacg aatccatg 418

<210> 1951
 <211> 445
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E1-E12

<400> 1951

ggtccagaat atccgggtcg acggggcccg tggccacga accatttccc aaaatttccc 60
 cactcgcgaa ccctaacttc gaccagctc tcgcccaga tcccctcccc ctactctcac 120
 caggagcaga acccaccgc tcggaccgt ccgcgtaatc gccatgtggg gcggacgagg 180
 aacccggtga tccaagaag tatcttgagg agcggtgcaa gccacagtgt gtaaaaccac 240
 tgtatgagta tgagaaatgt atcaagagag tcgaggccga tgatactggg cacaagcact 300
 gcactgggca atattttgac tactggtcat gcacgataa atgtgtagca ccaaagctct 360
 ttgaaaagct gaaatgatat tggggcgcta ctttcagtga gtgagcctgg tcattggcca 420
 gaactttgtt caagttgaaa taatt 445

<210> 1952
 <211> 405
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E1-F11

<400> 1952

gggtcgaccg gggggctggg ggcattcagg aaccgcgtgc tatcgctgc atcttgggcg 60
 gagcccaggc ccagcctcg cagcgtatct aaaagcagtt tgctcgtgaa gtgaatgcag 120

ccctcccaaa gctcgaagcc acacgcccgc tcagatgggc ccagtgcgcc atcacgttca 180
 actcggcaga tcagctcaag tgcgcagcta ccgctggcgc cctcccatgc tttgctcccc 240
 aatcatcagc agcgtgcaac ttaccaagac catcatcgac gtgcgaagcg agaacgacaa 300
 ggccaaagcc ggcgtgccgc agctcccctc caacgcaaag aacaagatca tcgctctgcc 360
 gctcgaagaa cttccgaaca agataaaggg aatggcgcg aatgc 405

<210> 1953
 <211> 421
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-048-Q1-E1-F9
 <400> 1953

gggtcgacgg gtaaaataca aggacaacca aaagcttaag cttggggatg ccccggaagg 60
 catccctct ttcgtcttcg tctatcggtg actttacttg gggctatatt tttattcacc 120
 acatgatatg tgttttgctt ggagcgtctt gtatgatttg agtctttgct ttttagttta 180
 tcacaatcat cctcgctgca cacacctttt gagagagaca cacgtgattc ggaatttggt 240
 agaatactct atgtgcttca cttatatctt ttgagctata tagtttttgc tctagtgtt 300
 cacttatatc ttttagagca aggtgggtgg tttatfttat agaaattatt gatctctcat 360
 gcttcaacta tattatfttg agagtcttaa acaacatggg aatttgcttt aattttgaaa 420
 t 421

<210> 1954
 <211> 430
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-048-Q1-E1-G9
 <400> 1954

ggtccagaat acccggtcg aggggatgcc atagtcaacg gcgacggcgg tagccgcgcc 60
 actgctgggt ctggtggtg cggcggcggt ggtggtggct gcggtggctg cgttccaccg 120
 gaggccaacc gcagaactcg tgcgcccct taccgcagc cttcggaag gtgatggacg 180
 cgccggtgct cgtgacgtgc acgcaccgct gcgcttgtag gagagagatc agagcaagaa 240

gagagcaacc agcgtgaaaa aaaacattag caaatcagaa ttgttgctcg atcccccttgt 300
 tgggggtggtt acaacttagt gtttagatca tctttgatga caattgacgc cgtcgatctg 360
 ttttaattgtg ttcctttggc tggttggtgc ttcagtcgca gccagaatt ggcgtggatg 420
 cgcggccgct 430

<210> 1955
 <211> 427
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E1-H9

<400> 1955

ggtccagaat tccgggtcga ccgggtacca atctacacac cctaggggtca tgcgtagtag 60
 tactttgctt cgagggctaa tgaactttca caataagtat gtgaattctt tatgactact 120
 atgagtccat ggattatacg cactctcacc tttctgcat ttgctagcct ctccagtacc 180
 gtgcattacc ctttctcacc tcgagagttg gtgcaaactt ctccgatgca tcgaaacccc 240
 atgatatgat atgctctatc acacataagc ctccttatat cttcctcaaa acaaccacca 300
 tacctaccta tcatgggtatt tccatagcca ttttgagata tattgccatg caacttccac 360
 cactccgttt ttatgacata cacattcatt gtcattttgc tttgcatgat catatagtgg 420
 acatagt 427

<210> 1956
 <211> 246
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-048-Q1-E2-A1

<400> 1956

tcccgggtcg acggggcgtg ccaatgtgaa ggtaaagggtg gggttccttgc tggcccgggt 60
 gttccttttg aactggcttg ctggggcctg gaaagagttt caaaatccaa aaatgggggt 120
 caacccccca ttggatgatc aggtgtctgc tctggacaaa aaaaaaaaaa naaaaaaaaa 180
 aaaaaaaaaa aaanaaaaaa aaaaaaatta aaaaaaaaaa aaaaaaaaaa aaaaaaaaag 240

cggccg

246

<210> 1957
<211> 330
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-A12

<400> 1957

atgcccgggt cgacgggcca aagtattcgg gtcattggctg actatccacg tccgagtcca 60
ccttcagatc gtggagctgt tgtgctgttt aactgaactt tccttgtcaa caaacaacag 120
gtctcttggg actttccctt gtcgtggagt actagtcgaa acttcttact cttcccttcc 180
cctttttttt ccaatccaat cctcaatact cacggataac caacctggcc gtagcttttag 240
gtgagatgta gcaaaagtac tacttggttt aacacagtat atcagacaaa atagcagatc 300
gcttcttctc gtaacttgcc gcaatgcctg 330

<210> 1958
<211> 428
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-A4

<400> 1958

cgggtcgacg ggggataaaa acatttacag ttggtggaac ggctccttgcc tttttgaaat 60
tctggacaaa atcgaagttc ctttgcgtga tcccaaaggc ccagtaaggc tgccaattat 120
tgataaatat aaagatatgg gcacagtcgt aatgggaaaa ttagagaatg ggactatcag 180
agaggggatg agtttgttgg ttatgccaaa caagacccat gtgaaagtca ctggtataaa 240
cttggatgag aagaaagtac gacgtgctgg acccaatgag aatgtacgtg tcaaagtgtc 300
tggaattgaa gaggaggata tcatggcagg tttcgtactt tcaagtgttg ctaatcctat 360
tggtgcttcc actgaattta ctgccagct gcagattcta gagttgcttg ataatgctat 420
tttccactg 428

<210> 1959
<211> 374
<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-A6

<400> 1959

attccccggt cgacgggaat gaaaagaaaa acgattctcc catcaacatg ccatcccaag 60
 agctgggtct gaagatatcg gaaacaacta gatgtgaaac tgaaatccat gatgaacgaa 120
 gtattccgaa aagatcaaat ctgtcagcat tcaccaggta ccatactccc atggcttccg 180
 atcaagggtg ggcaacattt cggggaagct gttcacctca agataacagc tcagaggctg 240
 tgaaaacgaa ctccacctgc aagatggagt caaatcaga tgctgctcaa ataaagcagg 300
 gctcaaatgg cagtagcaac aacaatgaca tgggctccag taaaagagt gccatcgaa 360
 agccttggtc agac 374

<210> 1960

<211> 421

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-B10

<400> 1960

cgggtcgacg gggcattcaa atacatccgg gaggtgctca agtgggagga ggacaaggac 60
 gagaactact accaggagga gtccttctac agcaccaccg agatgagctc ctcccccttc 120
 atccgagccg aatgagaccg cgtcccctgc ccccgccgaa ggccggttcc tataactaatg 180
 atgcgccgtt tcgttttgcg cgccagtcga ttccgttttg cgccgtacaa aaaatcattc 240
 attgattggt ggtctgtaaa aagttaatct gcagggtttt gttcttctga tggatgggat 300
 gtttttcatg tttgtgtctc ttggtccttg agatagagat gaagcatgat tgatctgttg 360
 gtgtgtatgt agtgagtggg actagcagtt tttctctagt cagtgcacag attgacctgt 420
 t 421

<210> 1961

<211> 364

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-B12

<400> 1961

atgcccgggt cgacggggga ttgatttct ttcactaacg gagcttataa gatttcctgt 60

tgagttttgt gttgtgaagt tttcaagttt tgggtagaga ttttttggac tatggaataa 120

ggagtggcac gagcataagc ttggtgatgc ccatggaacc ccaagatatt caaggatagc 180

caaaagccta agcttgggga tgccccgggc atccccctctt tcgtcttcgt tcattggtaa 240

ctttacttgg agctatattt ttattcgcca catgatatgt gttttgcttg gagcgtcgtg 300

tattatatta gtctttgctt tttagtttac cacaatcatc cttgctgtac acaccttttt 360

agag 364

<210> 1962

<211> 366

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-B6

<400> 1962

gtaccagtcc agaattcccg ggtcgacggg tatcttttat gaagaccgtg ttgttactcc 60

cttagatact gccatcacc tctccaattc aaatggctga taaacaagaa aagtaattga 120

aagtatagat attgtatgat agacaagtca atggatagtg gggaataaaa gagggcatga 180

aataattcat atttatgttg tctaaccaaa caggatagca tgacacaatt tcacatatat 240

atatgatggc taactaaaca ggatagcatg acacaatttc acattatgat ggctaactaa 300

aaaagatgga aagacatagt tcaaaatatg agactatgta aacaggatga catgatataa 360

ctatat 366

<210> 1963

<211> 354

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-048-Q1-E2-C10

<400> 1963

cgacggggga cgtaatgggc catacgggaa aggatagagg ggcctcaagg agtggccacg 60

cgcaccccaa gggctggtcc gaattggact aggagggggg ggcgcccccc accttccttc 120

tccccctcttc ctccttccct ccttctccta ctaggaatag gaaagaggag gggaatccta 180
 cttggactgg ggagtcttan taggattccc cacacctggc gtgccccct tgggcgggcc 240
 acctcttccc tccccctctt tatatactg gccagggggc accccataga cacacaagtt 300
 aatccttagc cgtgtgcggt gcccccttc atagttttcc acctcggtca tate 354

<210> 1964
 <211> 450
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-048-Q1-E2-C11
 <400> 1964

attccccgggt cgacggggga gtttagtagc atctcctaaa gtgatttcca taaaagtgcc 60
 tcccgagcc gaatctaaaa gatttctaga agcaaaattc aatccggcat aaaatttttg 120
 tataatcacc cacaattca aaccatgagt agggcaatta cgtatcatta atttcaccct 180
 ctcccaagct tgtgcaacat gttcatgac aggttggtta aagttcataa tatcgtttct 240
 aagagagatg atcttagcgg gaggaaaata cttagagata aaagcatctt tgcacttggt 300
 ccatgaatca atactatctt taggcaaaga cgaaaaccaa gttttagcac gatctctaag 360
 tgaaaaagga aatagcttca atttaacgat atcattatcg acatcttttt tcttttgcac 420
 atcacataaa tcaatgaagc tattcagatg 450

<210> 1965
 <211> 373
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-048-Q1-E2-C12
 <400> 1965

ccgggtcgac ggtgtacggc agtgaagaag gggaacacgg gaggaaggag gcggtcacac 60
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 agcaagggtc atgcacctgg tgagacatgt ttagtacctt tgtaattcta caaccacaca 180
 tctgatttt atgtactact actaggtcaa acaaaaagaa atgggttggg tcatctctta 240
 agaacatctt tgcttggtta gtggatgagg ggactcgatt ttccaagcca aacatcttgt 300

cacgaattat tataggctta tgaggacgac ttgagaaatc agatgtcaag ctgaacagct 360
gataacatag gtc 373

<210> 1966
<211> 464
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-048-Q1-E2-C6

<400> 1966

gtaccagtca agaattcccg ggtcgacggg ggaggagcat taactggcta tacctatcac 60
gacttgccgc cctaaaggaa tttgctttta tgaaggcttt aggagaccat ggattccctg 120
ttcccacagc ggtggactgc aatcggcact gtgtcattat gtcacttggt cccggatata 180
cacttggtca gataagagaa ttgcaaaatc cagatgatgt ttttgacaaa attcttggtc 240
ttgtaattcg tttggcggag catgggctga tacattgtga ttttaatgaa ttcaatatca 300
tgattgacga tgatgaaact gttacgatga tcgacttccc acagatggta tctgtttcgc 360
accggaatgc ccagatgtat tttgatcgag atattgggtg tatctacaag ttcttcaaca 420
aanagttcaa tcttaccan anaaaggtggac aagatgggtc tgaa 464

<210> 1967
<211> 316
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-C9

<400> 1967

acggggatcc ataatatatg agactgtaag gttggttctc ttccagtatg ttatcatggt 60
tgagattagg actaatTTTT agtacaagag aagaatgcta tgttggtggt tgttctcaaa 120
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 180
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aattaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaacgggcc cccaaaaaga ttcaaagcta aattccgcat aaaagaaagt taaaaccct 300
ccaaaagggc caccaa 316

<210> 1968
 <211> 450
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-D10

<400> 1968

atgcccgggt cgacggggaa gaggaccatt gttggaatat acaagccaag ttctataatg 60
 aaaatttccc actagtatat gaaagtgaca aaacaagaga ctctatatca tgaagatcat 120
 ggtgctactt tgaagcacia gtgtggaaaa aaggatagta gcattgtccc ttttttattt 180
 ggcctttctt tttttggcct ttttttggcc tttttctttt tttgggacaa tgctctatta 240
 atgatgatca tcacacttct gtttatttac aactcaaaga taacaactcg atactagaac 300
 aagatatgac tctatatgaa tgctccgac ggtgtaccgg gattgcatg aatcaagagt 360
 gacgtgtatg aaaaattatg aaggatggct tggccacaaa tacgatgtca actacatgat 420
 catgcaaagc aatatgacaa tgatgatgcg 450

<210> 1969
 <211> 414
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-D11

<400> 1969

cgggtcgacg gggaagaaga ccaaggcgga gaagcgggag ccggcggtcca aggaggccgg 60
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 gtacaagatc tacatcttca aggtgctgaa gcaggtgcac ccggacgtgg gcatctcctc 180
 caaggccatg tccatcatga actccttcat caacgacacc acaagcatcc gcatccgcat 240
 cccacctcac atcccatctc cccacacgct cgaaccacca gcagcagcag caccatggc 300
 acccaaggcg gcggagaaga agcccgcgga gaagacgacg gcggggaaga agcccaaggc 360
 ggagaagcgg gcgccggcgt ccaaggaggc cggcggcgag gggaagacga gggg 414

<210> 1970
 <211> 446
 <212> DNA

DOHERTY, J. H.

<223> Clone ID: LIB103-048-Q1-E2-D2

gggtcgacgg	ggtccattaa	tttcggggccc	aatgcatggt	agtagctgat	tcttaaataca	60
cacatacaga	tctcagtgt	taagggtcggc	ttcaatgaaa	caaccaccca	tgtactccta	120
catggcctct	catcgatacc	tttaccaaat	cgtgttcact	acaccactct	cattaccgac	180
ataatcattt	cgctctagcc	catcaccag	atgaaccaga	cctgacacaa	ctctaagcat	240
agcaggcata	gcaaggtagg	aacaacacat	acatatggct	caatcaactc	ctacacatgc	300
tagtggggtt	catctagtta	ctgtggcaat	gacagggtcat	gcanaggaaa	tgggttcaac	360
taccgtagca	cgcagcagtt	tgaatcgcgt	tgtcttaatg	cagtanaaga	gagcaggagc	420
gagaacatgg	gattgtatcg	atatga				446

<211> 361

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-D5

aattcccggg	tcgacggggg	agaagaggaa	catcttcaag	cagaaggcgc	cagaggctga	60
tgctgcggcg	agcggctgct	gttgatttca	ttcacgcacg	ctaatcccgg	gcatctatct	120
atgatctatc	tttatctttg	tggaggatgg	atgaaaacgt	ttgttgtttg	acgaagtgac	180
atctaagcag	ctcgtttgtg	tcgttttcaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	240
aaaaaaaaaa	aaaaaaaaaa	aaaaaaagaa	gaacaaaaga	ataaaaaata	aaaataaaaa	300
taaataaaaa	ataaaagatc	ataaaaaatt	gtttttttaa	ttcaattgaa	tggaagtagt	360
t						361

<211> 324

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-D6

<400> 1972

aattccccggg tgcacgggcc aagaaacgca caagcgagct gttaccctca gactgcaaga 60
gatcgaagcc actgtaactg tttaaactgt taacatgggc tgttggtgcca gtctatttga 120
tgcttgggaa ctgatatttt tcttaattct tatcggatgg gacttgccag agtttaaggt 180
gaagaatagc aagctgtttc atggaataaa aaagaaaaaa aaaaaaaaaa aaaaaaaaaa 240
aaaaaaaaaa tattaataaaa gataaaaaaaaa ataaaaataa aaaaaaaaaa aaaaataaat 300
aaaaaaaaataa tataaaaaaaaa atta 324

<210> 1973

<211> 444

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-D7

<400> 1973

attccccgggt cgacctctcc gtatgatggg agttcaaccc gaaaggaccg cgaactattc 60
agcaattctt cggcatgacg ctcgaaggga tgtatggatt gttcttttga tcacgaataa 120
agtgtccgga caccaccgag gatgcgggtc taaactgcaa ccgtccagat acccacataa 180
gtaatctacg gccgaacacg ctgtcttttc atttgtccta acatcattct gaaaaaattg 240
ctcttggcca ggactggata agaaaggcga aatgatcag gtgttcggcc ccccttcttg 300
aaggctcact ggatcccgtc ctagccagga tgcttgagct cgtaccttat caagcgccat 360
caggggaaga tagaggagg aataaagaag ctgaaagcgg gcctcgcgca ttactcatcc 420
aaaccagggg aattagcgtc tccg 444

<210> 1974

<211> 428

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-048-Q1-E2-D9

<400> 1974

ccgggtcgac ggggaagaag accaaggcgg agaagcgggc gccggcgctc aaggaggccg 60

gcggcgaggg gaagcagcgg ggcaggaaga agggcagcaa ggccaagaag ggcgtggaga 120
cgtacaagat ctacatcttc aaggtgctca agcaggtgca ccccgacgtg ggcattctct 180
ccaaggccat gtccatcatg aactccttca tcaacgacat cttcgagaag ctcgccggcg 240
agtccgcca gctggcgagg tacaacaaga agcccacat caggtcccgg gagatccaga 300
cctccgtccg cctcgctctc cccggcgagc tcgccaagca cgccgtctcc gagggcacca 360
aggccgtcna caagttcacc tcactctagg cttcaccgtc gtcgttttaa cgaatcgatg 420
atgatgtt 428

<210> 1975
<211> 416
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-048-Q1-E2-E12
<400> 1975

atgcccgggt cgacggggca cgtgggtccac gaaccatttc ccaaaatttc cccactcgcg 60
aaccctaact tcgaccagcc tctcgcccca gatccccctc ccctactctc accaggagca 120
gaaccacccc gctcggaccg ctccgcgtaa tcgccatgtg gggcggacga ggaaccggtt 180
gatcccaaga agtatcttga ggagcgggtgc aagccacagt gtgtaaaacc actgtatgag 240
tatgagaaat gtatcaagag agtcgaggcc gatgatactg ggcacaagca ctgcactggg 300
caatattttg actactggtc atgcatcgat aaatgtgtag caccaaagct ctttgaaaag 360
ctgaaatgat attggggcgc tactttcagt gagtgagcct ggtcattggc cagaac 416

<210> 1976
<211> 435
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-048-Q1-E2-E5
<400> 1976

attcccgggt cgacggggcag cggggcctcc tccagttcgg ctccagcacc tccgagattc 60
ttgagactgc attcaagaag gaaactgtcg gcctagttac gagggagcag tatgttgaga 120
agaggggttaa catacgaact aagattgagg aggaagagaa agagaagctt caaaaattgc 180

aacaagaaga agaagaactg caaatgcaga aaaggaaaaa gaggagagtg aggggagatc 240
cacgcttgtc attctatgat gacattggga acggaagtga cgaggatgag tttgagaacc 300
aagaaactca gaagaaacaa cttggaaagg atcccacagt tgagacaagt tttctacctg 360
acagagatag agatgcagag gaacaagcag agcgagaacg cttgaagatg cagtggtcgc 420
gtgagcaaga attga 435

<210> 1977
<211> 446
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-048-Q1-E2-E6

<400> 1977

aattcccggtg tcgacgggat tatcaaaaaa cgaagtcgtg tgcaacttga caccactgac 60
gagggatatc atatgcgtat tgcattctagt tagtacaaaa ccatggtgca ttataggtct 120
ttttgagtat tgtgcgacct gttagatttg acggcatcat cctcactaaa attaaatatt 180
ctccttttgc tctgtatttg atttgaatgt acaatataga tagtaaagca agtttgacta 240
gaggaattca ataagcatgg gggttctacg aagattattc atacaccaac atacaaaaca 300
tgacaatcat ttgatttacc aaacaaagtt ctaaagagaa aatgaatata tgaaatatat 360
tgcactttat aatagcatta catggcatcg angagcagac acagtcata tatttacatt 420
tttgcttgca ttattcatgt attgtg 446

<210> 1978
<211> 448
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-E7

<400> 1978

attcccggtg cgacgggagt ggacgagtaa tatcatcgtc tatgaagctc gacttgtggc 60
gaagagtttt tcacaagttc aaggagttga ctacgatgag atcttctcat ccgtagcgat 120
gcttaagtcc gtcggaatca tgttagcatt agctgcattt atgaaatctg gcagatggat 180
gtcaaaacga gtttccttac cagtcttcgt aaggaaaggt tgtatgtgat acaatcaaaa 240

aggttttgtc aatcctaagg ttgctaaaag gtatgctagc tccagcgatc cttccatgga 300
 ctggagtaag catctcggag ttggaatata cactttgata agatgatcaa agattttggg 360
 tttatacaaa gtttatgaga aacttgtatt tccaaagaag tgagtgggag caccatagaa 420
 ttactgatga gtatatgttg ttgacata 448

<210> 1979
 <211> 451
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-048-Q1-E2-E8
 <400> 1979

cgggtcgacg ggataccccc cgcaagtgcg gacggtgaac atgatatacg caaccacat 60
 ccccaaaagg gagecgaagc atgctctcaa ggacgtctat gtgttgagc cagtcgcccc 120
 aaagttcaac ccatggctct cctgcccgat cacttttgat cgaagggacc accccactag 180
 catccgtcat gatggattcg ccgcattggc cctagacca attatcgacg gatttcacct 240
 caccagagtc ctaatggacg ggcgcagcag cctgaacctg ctttatcagg atacagtgcg 300
 aaaaatgggt atcgatcctc aaggattaaa ccacaaaga caacctttaa aggcgtcata 360
 ccaggtgtag aagccagctg tacaggctcg gttacactcg aagtggctct cggaattccc 420
 gataatttcc gaagcgaaga gttaatcttc g 451

<210> 1980
 <211> 377
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-048-Q1-E2-F11
 <400> 1980

atgcccgggt cgacggggga gctgagggt tccaggaacc gcgtgctatc gcctgcacct 60
 tgggcggagc ccaggcccca gcctcgcagc gtatctaaaa gcagtttgct cgtgaagtga 120
 atgcagccct cccaagctc gaagccacac gcccgctcag atgggtcccag tgccccatca 180
 cgttcaactc ggcagatcag ctcaagtgcg cagctaccgc tggcgccctc ccatgctttg 240
 ctccccaatc atcagcagcg tgcaacttac caagaccatc atcgacgtgc gaagcgagaa 300

cgacaaggcc aaagccggcg tgccgcagct cccctccaac gcaaagaaca agatcatcgc 360
tctgccgctc gaagaac 377

<210> 1981
<211> 425
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-F5

<400> 1981

attccccgggt cgacggggcg cggcgagcgc cggcggcgcc gggaaggaca aggacagggga 60
cagggacagg gccaggggct ccgcggtctc cttcacggag ggcgagaagg tgctcgccta 120
ccacggcccc ctctctacg aggccaaggt tcaaaaaact gaaaatcggg aggacgagtg 180
gcggtatttc gtccattatc ttggatggaa taaaaattgg gatgaatggg tcgcaagtga 240
tcgtttattg aagttgactg aagagaatgt tcgaaaacaa ctagagctga aaaaccagtc 300
aggggacaag accgtcagga ctggtggacg gtcagcacag cataacccaa aaggctctaa 360
tgtggatgca aaagccgata aagatgacac caaaggtctt gtcaagggga agaagcgcaa 420
gaatc 425

<210> 1982
<211> 444
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-F6

<400> 1982

attccccgggt cgacgggtca cctaacgcct tgcttctaga tactgacctt gtaactctag 60
ataccctacc tggcgtgtat ataagacaaa ggttttatcc tgtagggggg acatcaatgc 120
aacatcattc accttgccct agagtttgac cacatctcac gatctggagg tagatcaact 180
ctatactcga tacattccat taatataaac gagagaagga tgtaggggtt tacctccatc 240
aagagggccc gaacctgggt ataacaccgt ctctttgttc ttgtcaccat ccggctgaga 300
tccatagcac ggtcagcccc ctgcgggctt tcatgttttg tccagtccat gcactataa 360
cttaaaagat atggttctag tcctatgatt aatcatgtta gattggcact agtggcaagt 420

atacagtttt gttatcaatg atgc

444

<210> 1983
<211> 437
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-F7

<400> 1983

attccccgggt cgacctgtca tcgcaagttc aacatgtggg tgccatggag agcatcagcg 60
tgacgatggc ggaggacgga gctttgcacg agcctgacca cgacctctcc gacgtgtcga 120
tgagcagggg tttctcacag ctgatcaaag ccgaggggag gtgaaaacgc gccggatgat 180
gtgtagggta ccggtagagg tgtgagcaag ccttggtttt ttcttttctt gttgaagttt 240
acctgagatg tgtcacgtgt aattggttgt ttcattccctt gtaattgtac tgaactacgg 300
tttggttttc tgatggcctt acctcaccca cttctggggg cacacgattt atcagatata 360
ggtatcttct tgtaaaaaaa aaaaaaaaaa aaaaagaata aatgggaaaa aatgaaaaaa 420
aaaaaagcgg ccgctct 437

<210> 1984
<211> 359
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-F9

<400> 1984

gggtcgacgg gtaaaataca aggacaacca aaagcttaag cttgggggatg ccccggaagg 60
catccccctt ttcgtcttcg tctatcggtt actttacttg gggctatatt tttattcacc 120
acatgatatg tgttttgctt ggagcgtctt gtatgatttg agtctttgct ttttagttta 180
tcacaatcat cctcgttgca cacacctttt gagagagaca cacgtgattc ggaatttggt 240
agaatactct atgtgcttca cttatatctt ttgagctata tagtttttgc tctagtgtatt 300
cacttatatc ttttagagca aggtggtggt tttattttat agaaattatt gatctctca 359

<210> 1985
<211> 449

<212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-048-Q1-E2-G11

 <400> 1985

 atgcccgggt cgacgggtat cttaaagtga ccaggcgggtg gggctctggg ctttcttgct 60
 atagtgtgct ggtgagctgg gatggcccga accgcttttc ccccttcac tcgaatcac 120
 tccaaatcct ggataaatca aaccacaaaa gaatgtatag catggggact ttggaatata 180
 ccctcatgta tggcctttct cttagccgcc cagattgccc atagcgtgac ggatagcttg 240
 atgaacagct catgagataa tgactgcata tgtgtaaata accattgttt cgcattgggt 300
 tctgaggtgg ctgcgatttg ctgtccaagc tttcatcaa ccagcgccca tgtacacctc 360
 gacatggtgc aatctactag agagtgttc catgagtcgg gcgcccaca tattccacat 420
 gcacttgagt caaacatgtg cctgtgtga 449

<210> 1986
 <211> 438
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-048-Q1-E2-G3

 <400> 1986

 cggaaccag ctaatgtatg taagacgtct gagctggaga gataatttaa aaggatcac 60
 tgatgattac ttgcattcgc cacatattga gtcaacagac tcaaatgat aatgacaagg 120
 aatgttaata agatttctat acttatggga ttattcataa tgaaagaaaa caagaaattc 180
 cagagcaata ggttgctgag gatttttggga atatcgggtg gtatttcaaa gacttttgtg 240
 taacacataa acaactgggg gatgagcgga tattctataa atgcgagaat taaccgtagg 300
 ggtattcaag tgacaagaac agcaaggcag taagctcaag ggattatcga aaccacgacg 360
 agtttttcag ggtatcttgt aataacaaga ccaactgggg atgatataag aataacaact 420
 gtaagtagtt atccatac 438

<210> 1987
 <211> 449
 <212> DNA
 <213> Triticum aestivum

GeneBank

<223> unsure at all n locations
<223> Clone ID: LIB103-048-Q1-E2-G7

<400> 1987

attccccgggt cgacgatgtc aggggtgcagc gatacgtcgc cgctggtgac ggcaagctct 60
gtctccatgt ccgcgccgtg ctccgggtgct tcagcagccc cagcgtcgcc actccctccg 120
atggggcgct ttggcgccat cctcatacac tgacggcttc gaggactgag agcggcattg 180
aggatgcaag cagacagaga ggattgtgtg tgtgtgtgtg ccgaggatgg ggggtgcggc 240
cgcttgggca cgccattaat atggagtagt gggagagagg cgggtcgcgg tcaaaccgct 300
ggctcgctc ccagtgcgcc tgtgcaccgg actgctggca cgcctaccat cgtttcacac 360
agctactcgc acgcctcccg atgacactgt gcagcgagca tgcctncat caattcacac 420
acctgcacgc atgcctcctg gtctgcctg 449

<210> 1988
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-G9

<400> 1988

gggtcgacgg gataccatag tcaacggcga cggcggtagc cgcgccactg ctggtgctgg 60
tggtagcggc ggcgggtggtg gtggctgcgg tggtcgcgtt ccaccggagg ccaaccgcag 120
aactcgtgtc gccccttacc cgcagccttc gcgaaggta tggacgcgcc ggtgctcgtg 180
acgtgcacgc accgctgcgc ttgtaggaga gagatcagag caagaagaga gcaaccagcg 240
tgaaaaaaaa cattagcaaa tcagaattgt tgctcgatcc ccttggtggg gtggttacia 300
cttagtggtt agatcatctt tgatgacaat tgacgccgtc gatctgttta attgtgttcc 360
tttggtcgtt tggtgcttca gtcgcagcca agattggcgt ggatgccccg gcgctct 417

<210> 1989
<211> 413
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-H2

<400> 1989

aattccccggg togacaagaa aaaatccagc gagaacatca aggtcatcta cgccccgcgcc 60
aagcagtacg ccgaggagta cgatgccag gacaaggagt tggttcagct taagcgtgag 120
gcccggatga aggggtgggtt ttatgtcagt cctgaggcca agctgctgtt tgttgtcaga 180
atcagaggta tcaatgccat gcacccaaag accaagaaga tcttgcagct gttgcgtttg 240
aggcagatat tcaatggagt gttcctgaag gttaacaagg ccaccatcaa catgctccgc 300
agggtcgagc catatgttgc atatgggtac ccgaacctga agagtgtgag ggagttgatc 360
tacaagagag gttatggcaa gctcaacaag caaaggattc ctctgaccaa caa 413

<210> 1990

<211> 463

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-H3

<400> 1990

gtgacgggtcc taaattaccg ggtcgacggg attacatcat gtagttgatt actatattgt 60
ttatttggtg gaagattata tgttcagatc cgatatgcta tttaatacac ctctaatttt 120
gagcatgatt atcatttgtg ggtagttact ttagttcttg aggtcatggg agaaatcatg 180
ttgcaagtaa tcatgtgaac ttgatatgtg ttcgatattt tgatagtatg tatgttgtga 240
ttcccgtagt ggtgtcatgt gaacatcgac tacatgaaac ttcaccatat ttgggcctaa 300
gggaatgcat tgtggagtag caattagatg atgggttgcg agagtgcag aagcttaaac 360
ccgagtttat gcgctattcc gtaagggacc gattgtatcc aaaagtttaa tgctatgggt 420
agaatttatt ettaatactt ttctcatagt tgccgatgct tgc 463

<210> 1991

<211> 469

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-048-Q1-E2-H5

<400> 1991

ggtaccagtc cagaattccc gggtcgacaa aactgagaaa gctgaagctg tacagccatc 60

atcaggtgaa caagttgaga ctgtcaagaa aacatgccaa gctgaacctg taaagcaatc 120
atcaggtgca caagttgaga ctgtccagca agcatgccaa cctgaagctg acgctgttaa 180
gaaagcagaa aaattgctgc tgagctaact gggccatctg acccaattgc aacagctgat 240
gtagctgagc aaacaatgga aaatcaagct ccaaaagatg cagttgaaat tccttgtgat 300
gtgaagctgg aggatgaagc attgactgaa gaatctgtag atcaagttgt aactgagcaa 360
gtcaaagttc catcagatgc tgtacctgac acttcaaaag ttcaaccaga aacaccagtc 420
gaacacgtgg gaacagaagc agaagcggac actgctcaag acctaactg 469

<210> 1992
<211> 467
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-048-Q1-E2-H7
<400> 1992

gtaccagtcc agaattcccg ggtcgacggg ttctcttgat tacaagaatt tgatttacat 60
atcattgata gaaaaggagc tgagaacccc gtagctgata atttatctag gcttgaaaat 120
gtgcctgatg acccactacc tattgatgat agttttcctg atgagcagtt agctgcaata 180
aatgttgctc atagtactcc ttgggatgct aactatgcta attacattgt tgctaaacat 240
ttaccaccta gctttacata ccaacaaaag aaaaaattct tctataattt aagacattac 300
ttttgggatg acccacatct ttataaagaa ggaatagatg gtattatttg acgttgtgta 360
cttgagcatg aacagggaca aatcctacgg aaatttcact ccgaagctta tggagggcat 420
catgctggag atagaactgt tcacaaggta ttgcaatctg gattttta 467

<210> 1993
<211> 343
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-049-Q1-E1-A1
<400> 1993

gggtcgacgg ggaagaagac atatgtgcaa cagctagaaa gcagcaagct gaagcttgca 60
caactagagc aggagctcca gaaagctcgc cagcagggaa tcttcatttc tagctccgga 120

gaccaaacc atgcatgag tggaaatgga gcaatgactt tcgatctaga atacactaga 180
 tggcttgagg accaaaacaa gcaaatcaac gagttgagga ctgccgttaa tgctcatgca 240
 agtggcagtg acctgcgcct tatcgtagat gggataatgg cacattatga tgaaatattt 300
 aagggtcaaag gtgtcgctgc caaggctgat gtgttcata tac 343

<210> 1994
 <211> 374
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-049-Q1-E1-A10
 <400> 1994

gtaccggatt tacaattcgc gggctgacgg ggcagcggac ggcgttgagc gggccggcga 60
 ttccggggtc gcgggcgctc gcagaggggt tggtagatg cggtggcgcg agggggctcg 120
 cggggtggtg ttggagagtg ttggtggcag ctatcgtgag cgcaacaagc tcgagaacct 180
 ccggttatct ccccgctgctc cggcgatgcg gacgagctcg ttgacaaagc tggagcatac 240
 atacgaggat ggaacattgt caaaacgatg ggccacggcg agggcaagcg atttggtgaa 300
 agaagaagtc gcggagggct cagcggtgaa gaaaaaatga tggagaactg cgaatggcca 360
 cagatggcaa cact 374

<210> 1995
 <211> 351
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-049-Q1-E1-A11
 <400> 1995

aattcgcggg tcgacgggag gaccgggcta gcccccttct gtaagaccaa cccagcccca 60
 gcggtgaagcc gctgatctga acattttatc ttcttctgta gacacccttc acctgaatct 120
 ttaagaaatc atcattgtat ttttcaggct gatgacaaat tctggaaggt caaatatgac 180
 catgaggtgg ccaagaaggc caggaaggct aagaaagccg ccaagagagc cgctccccgc 240
 aagaaaggaa gtangcctac tgcttcagag ctgctgcaac taagcgacag ctccgattca 300
 gaggtaaccc cccaaaaaaa aaaaaggaca acaaaaaaaa aaaccggccg c 351

<210> 1996
 <211> 462
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-049-Q1-E1-B10

 <400> 1996

taccggtcaa gaattcccg gtcgacgggt ccaagaaaga atgtagaaat gaagttatcc 60
 atccacacaa tgtttatatt atcagtttgt cacaatccat atgaatccaa acaccttattc 120
 tttagatgat aggtcgtttt ggttgttttt ttggctgtta gttcatatct tggcacgccg 180
 tgccctgggag tgttccttgt ctgtaataag tccatatgga atcgttgacc tgggggatgg 240
 ttctaacact tgcaatatct aaagagtatc tctgtaaact ctgcaagtct gatgcatgat 300
 cagcagataa tcatagtttg tagtttacag gcaaactgcg attctaggaa gtgatacgaa 360
 cataaatgac gcatgcatgc gagaatcaat gctactcatg agctacacac catttagcag 420
 catcatgctt atcgtgctac taatgcaacc tatgttttga ac 462

<210> 1997
 <211> 460
 <212> DNA
 <213> Triticum aestivum

 <223> Clone ID: LIB103-049-Q1-E1-B12

 <400> 1997

ggtaccgatc cagaattccc gggtcgacgg gaaagatcat aagtgtact tatgaattaa 60
 gtgccaaaga tggcactact tagatctatc ctcgctttta tgccatagcta ggggcattaa 120
 acggtagcgc tagttgggag gcaaccaat tttatttgtg ttttttgttt ttgtttctgt 180
 ttagtaataa attttgtatc taccttctgc ttagatgtgt ttccatgttt tatttagtgt 240
 ttgtgccaaag tagaacctat aggataacct atggatgatag ttaatttgat tctgctgaaa 300
 aacagaaact ttgtgctcac gaaaaaatt caataaatca cagaaacatg attttgcatt 360
 gattcatttt gctgtagatt aatagaaaca ttttacagga cgtcctattt tggtaggatt 420
 tttagagttc cataagtgtt cgaaagttac ggattgctac 460

<210> 1998
 <211> 376
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-049-Q1-E1-B6

<400> 1998

attcgcggt cgacgggcaa gctcacacca atgaggttag caagggcaaa ccactagatt 60
 gggtttcagg acaaccagtc acagatgagc atggacgcct tcagattata aagaatgatg 120
 acctcgaaga gctccaagaa ctcggttctg gaacttttgg aactgtatat catgggaaat 180
 ggaggggctc tgatgttgca ataaaaagaa tcaatgacag atgttttgct gggaagccat 240
 ctgagcaaga aaaaatgcgg aatgacttct ggaatgaagc atctaacctt gctgatctgc 300
 accaccccaa tgttgtggcc ttttatggcg ttgttctaga tgggcctgng ggatccattg 360
 caacggttac agaata 376

<210> 1999
 <211> 393
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-B8

<400> 1999

attcgcggt cgacgggcct caggagattg gtttagcgat tgctaaggcg caacatcgtg 60
 cacgtttgta gtcggattgt caaagtcgtc tccaccaa at cgatagttat catctcatcg 120
 aaagatcggg acaccctcgc ctctatcaag tggatcagt tttcaggttg ctcggtgaga 180
 atttccagtt ttcttagatt agatttattt tcttacctat tgtccaagaa aaagccacaa 240
 aaaagagtta gatctattca tccttggtcc aagccagtct gagcctttgc aattttcttt 300
 tcattgcttg catagttgaa ttatcggttg catcgctcgtg taagttgctg gtcttagcgt 360
 ctagttcctt tagagtttcg agttctgttc aca 393

<210> 2000
 <211> 444
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-049-Q1-E1-C10

<400> 2000

gtaccggtcc agaattcccg ggtcgacggg ccattccaata tatggtttct gtttgccgat 60
 caaatgatgt acgtgttccc ttctgetcac aagatgattc tggcctgtct ccaaacaatca 120
 cagaaaggta attgtgttgg taagctgatg atgcgcatgc gaggacgtgc gtattgtaca 180
 acttgatgta ccaatacatt ggtagggtag gacggccttt gccatgtcgg gtgcgctcgc 240
 ttggcaggcc acaagacaat aaaaagtata tttggtggtg tttgcggggg ggagatcgca 300
 cggaacaat ctatttgttc tattttgccc gggttctcca ccctgccatg gtgtctctgt 360
 ccttctctg tggtgttgat tccaccgat catctgaagt acaccgcat cctacatagc 420
 taatatgtga acaagcctgn gcgc 444

<210> 2001

<211> 462

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-049-Q1-E1-C12

<400> 2001

aggtaccggt ccagaattcc cgggtcgacg cctgccctca gcttgatgcc atcaagagcc 60
 cggctctgcag cgaagggtgcg cagctggcct tcgctcgtgt caaagttcag tgggcgaaga 120
 tggacgtgt caagctcgcg accgaaggac cgcccgcggg caaggagcac cgcacgcccg 180
 agcagtattt tgatgatgtc ctgaagggat cccgcattgt agagggccag tgtgcaaaag 240
 acattatttt tgaatgaaga cgttcatgtt atcccgctct gtattatgaa acaaagctga 300
 tttgtaatat aatgcttggt gtttgtttaa gttttgcct cctgtgcggc cattttatta 360
 agtctgaaag ttggccactc gccgggttca gcctccacgt aggtagtacg gnggtgttcg 420
 gggtggaacc tanacactcc ttgaccaaga gtttggtcct tg 462

<210> 2002

<211> 412

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-049-Q1-E1-C6

<400> 2002

gtcgacgggc gacagtgaga ggcgcccaca tcaacctcaa ggtcaagggg caggatggca 60
atgagggtttt cttccgcatac aagagatcca cacagctgaa gaagctgatg aacgcttact 120
gcgaccgtca gtctgtggat ctcaactcca ttgctttcct ttttgatggg cgtaggctcc 180
gtggtgagca gacccctgat gagcttgaga tggaggaagg cgacgagatc gacgccatgc 240
ttcaccagac cggaggggtgc tttcctggcc cttagaagga gcttgctgca gcctggctgt 300
tctatgtcgt atgctacctt tagaactaga gtaaaatgta agaagtgaaa gaacttgtga 360
ggctatgggt ctgtgccata gcctganggg gggctctggag gtgaaacaac at 412

<210> 2003
<211> 388
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-C8

<400> 2003

attcgcggt cgacggggag gagatggtga tggccgtcag ggtcgccatc gtgtgcctct 60
cggagctgcc cgccgatcgg ccatccagcg atgaactcgt cgcgatgctt gccagctcc 120
acagcttcta gccacctcca tcatcgttct agcagaaagt ttcttcagaa catcttccat 180
cgcgccagac gacgccgaat ggagctggat cggaccccg cgggccatac agtcccacca 240
tttcagcttc ttgagctgaa ttcagtttgt ccagatggga accagcaatg tagaggccga 300
acaacaagtg tggcaaaata gcttcatggc acatgctggg gggtgaggtt catgtaagat 360
gatgatggtg atgttctggc catgaatg 388

<210> 2004
<211> 390
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-D10

<400> 2004

ggtagcgatc tagaattccc gggtagcgac gcattggggac gttcaaggag cagttgatgt 60

ggacattgga gccaatccct ctgctgaggg tgggtggtgat gatgaggggtg tcgatgacca 120
 ggccgtgaag gtggttgaca ttgttgacac cttccgtctt caggagcaac ctgcttttga 180
 caagaagcag tttatctctc acatgaagcg ctacatcaag aacctctctg ccaagcttga 240
 aggggatgat ctagatgttt tcaagaagaa tgttgagtct gccacaaagt atcttcttag 300
 caagctcaag gaccttcagt tctttgttgg cgagagcatg catgatgatg gccgcgtggt 360
 gtccgcctac tacaaagagg gaccggctga 390

<210> 2005
 <211> 292
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-049-Q1-E1-D11
 <400> 2005

ggtaccggac cagaattcnc gggtcgacgg ggtacttcaa gatgaagaat ttgtgctgga 60
 ggacacaaac tatgagatgg aaccattgct tgtaccggaa gggatatgtt ttgtgctggg 120
 agacaaccgt aacaacagct tggactccca taactggggg ccgctcccgg tgaggaacat 180
 acttgggaga tctgtgttcc ggtactggcc accgtctaag ataaccgata caagatacta 240
 ccaaccggac gcggcactct acgcggtggg gatgtcgtga cgactcgtgc ct 292

<210> 2006
 <211> 446
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-049-Q1-E1-D12
 <400> 2006

ggtaccgatc cagaattccc gggtcgacgg gggcacaaaa gctggctgat tttgcgttgg 60
 accgggactt tgaagttagc ttctcaacct atgacagagt cctggaagcc ctgtacactg 120
 aggagaagac gttgccagcc tactccatgc tctgcaagat caagcacaaa gggggcattg 180
 tagaccagaa gggttgcatg gctttgatgg gtagcttaaa agctggagga tactcaaagc 240
 aagctgacat tttgtctagg atcttgggtg agaattggatc gtcaacatcc aagaggggca 300

agaagtctgc catgggtgca tagggaggtt tctgggttta tgaaatggc ctattttcct 360
 ttctgaattg aagaaacagt ggtttgtttt gttttattaa tgcttggttg gccatctgtc 420
 agattgggat tttcatccta gaagac 446

<210> 2007
 <211> 402
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-049-Q1-E1-D7
 <400> 2007

gtaccggacc agaattcgcc ggtcgacggg gaccctaaaa agaaatcctc tttcccattc 60
 acgttttcac actcactcat cttgctcttg ctcttcccct tgccttatcc cttttccac 120
 tccaaaattg ctgccgccgg tagctcccat cagcttgatt ccctgattca gtgccttgag 180
 cttgctcgtc ctcacctaca gccagccccg cagcttgatt catttggtgc gccatagcgt 240
 gaccttcgac ggcggctggt ttgtctcttg atctcctcgt acgcctcctc ggtctcctcc 300
 taggctggta aacgtcgatg gagtggtagg agggcccaag gtgcagctgc tcaagggagg 360
 aggcgagatc atcaatctgc acgatgttgt tgctgtcaat gt 402

<210> 2008
 <211> 390
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-049-Q1-E1-D9
 <400> 2008

taccgatcca gaattcccgg gtcgacggga agtgcgacta ggacgagtgg gcgtggatcg 60
 ttagttcatc ggaagtagta ctagttttct tctactgtaca ttaaataaag agttttgttt 120
 cgtacttaca caatttaaaa tgattgttat ggagagaacg agaaaaccac tccactatat 180
 attagtcgta tacacgagag tactatatgg acacagcttc attgacttag tgcacctgcc 240
 tttggattta tgacaggtgg gcccaaatg tggctggctc acctgtcata cagccaaaag 300
 caggtgcagt gaaggcaccg gagcttagtc cgtactacag tagtacatat ataagcggga 360
 gcctcagcac ttgttcccta aggttttgtc 390

<210> 2009
 <211> 365
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-E1

<400> 2009

gggtcgacgg gtcattacaa acatatacta ctccttaac caataaacca tgcattataa 60
 tggatgatta gtctgcaggg gcagccatgt tctcgccct cgtctgattc atgcacacag 120
 gggactgata acaagccaac tgattccatt aatttgctgg ctctgcctaa atcagaaaat 180
 aaaataaaaa aatagcactc caatacattg tggagttaa ctcgtcgagg ccagggtgcc 240
 gcttctccca taatagcag ggcaccccat ccatcattt ttagagctt gtgaatcatc 300
 tgagcttata tatagttagc tgaatgaaga agcatcatgc atatcatgc aacgtaccgg 360
 cagct 365

<210> 2010
 <211> 395
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-E1

<400> 2010

aggtaccgat ccagaattcc cgggtcgacc ttgaactga tttcatgcc atggaaacga 60
 tgtagatctt atcattaaag cttctcttac attaattatt cccttggtat aagttcatct 120
 catatctggg atctggcctt gtcgcaatcg tggttccgac caattttct ccttgattcc 180
 atttctcaga caagttgaaa tacttgtctt ctgttgatcg atacatctcc gcaacctcta 240
 ttttgatatt ccttcgagta ttgccctccg gtatctcgag aatatcgaag aactgtgttg 300
 cttcccatga gtcttcatct agtattgctt ctcaacgttt tcaaattccc ccaagttttg 360
 agttaatagt cactccagaa caccgataag tgaat 395

<210> 2011
 <211> 411
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-E5

<400> 2011

taccggatcg agaattcgcg ggtcgacggg aggaggtagc caggcgggct gggcttgtgg 60
tgggcgctag gtaagttcca ggtgagtctc tgctttttcc ctttttcttt ctcttttcta 120
attctgacat ttgtttctgg acttagtaaa aatggctagg cactttcaaa aatcatgcaa 180
ctaactgagg tcaactgtttg gaatatttcc aacagtaaac atttcagttt gtgattattt 240
ggacatttaa aatattttat aacattcaaa tgcccaaagt caaatggagt atgatttaat 300
ttagagccca aatatgtcat gaaaaaatgc gcacacctc tggttactgt ttccagcatt 360
ttccaaaaat gatgaacatt tttgaaagcc atttggattt actgaaaata t 411

<210> 2012

<211> 420

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-E6

<400> 2012

ccgccgttac cggacaagaa ttcgcgcggt cgacgggagg gcaaacggag atcgttgaaa 60
gatcttgctg ctcaagaact ttgtgttaag atacaacagc aggagcactg cccgattgag 120
gatgctcgcg cagcaatgtt catttacaag aagcacaaga aaggttggga gaagaacaag 180
aaagagcaat tcaggttcaa gaacaagcag aagaagcgag gtaataagaa atctgccgaa 240
gccaatgaga aggaccccaa tgtcccaata gttctactgt aggaaatata gatgtagggg 300
agctagggcc aagcagtgtc gttcttaaca tggatttcac gacgccaag ggtatgccgt 360
cgtgtgggaa tttcagatgg accctgtcaa gaactcaaga tcagcacgcc aacctggaaa 420

<210> 2013

<211> 465

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-049-Q1-E1-E9

<400> 2013

ggtaccggtc cagaattccc gggtcgacgg gactcttgat cccatatttg ggttcatcta 60

gggaggcgct caacacaacg aacaaggcaa cgggacttat aatccttgaa cactctcact 120
tagccataga attctataat tttaaatttc ggcgaagccc ctagtctttg gaaggccgaa 180
tttggggcgc tatccacgcc tgggcccggac aaagtcggct cccactcta agcggcataa 240
gtctttaagg actcgcaaaa aacctctcga acagcgaaca gctctcgct catcatgacg 300
gtcagtttta gctttctcaa ccgaggcgct cgcccagctc aaccggggcg caatcccagt 360
tggttctccc ggtgcaacct taccgatac aacggaacgt aaggtaacan aacatgggag 420
ccgggcaaac ccaactattg acccaagaca tgattcagag acgat 465

<210> 2014
<211> 443
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-049-Q1-E1-F10
<400> 2014

attcgcggt cgacgggttc actgatattt gggttttgtt tggccaactt gatctattta 60
tcttgcaatg ggaaggggtt ctttgtagt ggttcaatct tacggtgctt gatcctagt 120
acagaaggga aaccgacacg tatgtatcgt tgctactaag gataaaacga tgggatctat 180
ctctacatat atagatcttg tctacatcat gtcattgttc ttattgcatt actccatttc 240
tccatgaact tattacatta gatgcatgtt gtattgtagt tgaacttgaa agacaatttg 300
ttcatatgca tcttctata caaaggatct ttctagagtt ttctaattatt gagcattctt 360
ttgttaagcg tgcttccact atatttctag ctcatgagtt tagatttatt atgaaagaag 420
ctagtgaac ttttgacat tat 443

<210> 2015
<211> 452
<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-049-Q1-E1-F11
<400> 2015

gtaccgatcc agaattcgcg ggtcgacggg gcttcggatc ttcggggtcg caaggaagaa 60

gaagagatga agaggcaagg ggagaatgga aaggaccccc ggtcttattt ataaggacaa 120
 agggataaat gacaagcgcg agaatcgagg agccaaaaat cgaatatctg atacaggtgt 180
 cgccttggtc ttcggtaatt aattaataaa agaagtattt ataggttttt tatacagaga 240
 tgatgtcatg acgatttgct gcaatttttag aagatgacgt catggcggtt taccaagctc 300
 atatggaaga gacgtcatgg tggtttaaaa gggttaaaag aagatgttca aggaaatttt 360
 ccaagtaatg aagattgaca tgaacaggtt caaatcaatc tggggcctaa tgttggggat 420
 antactacta agtttaaacc gccaggaggg gc 452

<210> 2016
 <211> 419
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-F5

<400> 2016

attcgcgggt cgacggggca tcccatcttt cgtcttcgtt catcggtaac ttactttgga 60
 gctatatattt tattcaccac atgatacgtg ttttgcttgg agagtcattt tattttgtta 120
 gtttttgctt tctgttagtt agaatagtgt tttcttctt tagtttcaat aaaaagtcaa 180
 ggatagcctt tgccatgctt attttgctag ttcgaatgtt gctgttgaaa acagaaagtt 240
 taccgctgtt gcaacattcc ctagaaaagt cagagcatgg tctaacgttg aatctttttg 300
 cataatgagc tctggtaaatt ttattacagt ggtaatttta gttcataatt tttggagtca 360
 gggaagtatt gatactcttg cattctttac agactgtatt gttttgacag attgctgtt 419

<210> 2017
 <211> 454
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-049-Q1-E1-F6

<400> 2017

aattccgggt cgacgggcac ggacggagga cagagcacct ctcttcttcc aggttcttct 60
 ccttatcttc acttaatgta tgtgcatgtg ctgcagctca cccatggtct tgtttgtctt 120
 gcaagttagt gagcagcttc aggaggagct caagcacgac caccaagagg caccaccgca 180

gcaacagggc gactgtggaa ggcattgtgt atttctgtca gccagtcct gactatgtct 240
gtccgtgagt ccgacatttg attgctgttg aagcagctcc atgctgaaga agagaacact 300
tgtagagctt gtaacattac ttggagagct tgtaaagtac tgtagagctt gtaaagcatt 360
gtatatgtta tagcttgtat tacgtgtcat tcgtanagct tgtagtgaat ctggctaata 420
gtaattggat aaaccaggtg ggttctcgtc tccc 454

<210> 2018
<211> 377
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-049-Q1-E1-F7

<400> 2018
attcgcgggt cgaccgccc ataccaatac gtacgtacaa tggggtaggt gcggatggag 60
gtggaggttg agatcacgag catccatgat gctctagcga ccggagccag gcgagcggtg 120
tcgtccgagg tcgcgacgac gaccgcgcg tcgctggatc caaggacgga gtcattgctgc 180
ctacaggcgg cgcggaacc tccaaggtg gaaaggcgac ctccaagaca ccccgctag 240
cgcatgcac acggtcctcc caggtcatgc acgacgagca acgccgcaac gctggtgact 300
ccgagcgtcc ccacggaaag agccctcacc atcaatctcg agatgcgcag gccggcatgc 360
actccaagat gatggtg 377

<210> 2019
<211> 396
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-049-Q1-E1-F9

<400> 2019
ggtagcggtc cagaattccc gggtcgactt atggatttaa ccatatcccc atgatgccta 60
ctgagatggt ctctccaaat tccgttcatt ctgacactgc aagctctcat caacaagcta 120
tactgcatca aatgccttca ccccatggaa tggctcagta ccaagtgagg caaactaatc 180
ccaataatcc gcttgaaggc gaaggtagtt taagtggcaa ttctaggcat cgggggggatg 240
gacaagtgct ccgtgataaa gttgcctcaa ttgcaactgg cgggtgttgca aactaaaatg 300

gcaatgttga aaaggataat ggattcacta cggttgaacc caaccaagcc cggctatccc 360
gaacaaagga tttatgccaa aattgggttaa cccaaa 396

<210> 2020
<211> 442
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-049-Q1-E1-G11

<400> 2020

taccgatcaa gaattcgagg gccgacgggt tgatcaaaaa cccacaattc atcggatctt 60
gacaaacaca tcgcaaaaag aattacatcg aatagatctc caagagaatc aaggagaact 120
ttgtattgag atccaaagag agagaagaag ccatctagct aataactatg gacccgaagg 180
tctgaggtaa actactcaca catcatagga gaggctatgg tgttgatgta gaagccctcc 240
gtgatcgaat cccctccgg tagatcgccg aaaaaggccc caagatggga tctcgcgggc 300
acagaaagtt gcggcggtgg aaaagtgggt tcgtggctcc cctggatgtt ttcaaggat 360
gagagtatat ataggcgaaa gaagtaggta ggttgagcca cgagggggcca cganggcngn 420
ggcatgccta ccccatggg cg 442

<210> 2021
<211> 409
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-G6

<400> 2021

attcgcggt cgacgggagg ggctgcgcc cctctagggt ttccaccccc aagggtggc 60
ggccagccct acatcccatc taggggggag accaagggga ggagaggggg gcgccactag 120
ggtgggcctt aaggcccatc tggacctagg gtttgcccc tccactctc ccatgcgcct 180
tgggccttgg tggggggcgc accagcccac ccggggctgg tcccctcca cacttggccc 240
acgcagcctt ctggggctgg tcgccccact tgggtggacc ccgggaccct cccggtggtc 300
caggtacatt accgatatca cccgaaactt ttccggtgac caaaacatga cttcccatat 360

ataaatcttt acctccggac cattccggaa ctctctgtga cgtccggga

409

<210> 2022
<211> 348
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-G7

<400> 2022

attcgcgggt cgacggggac tctaagcaaa ggcagggtac aggggtggtgt caagggatcc 60
tggttgggtc acctgggttg ggaggaggag gcgtgttctc atgataaaag acttgccggt 120
tcatgatgct cagatccaac agcaatgaca tgcttgctct agtaggtccc cgtatatata 180
tgtcccctgc taattccttg cgtctggtgt aactatgaca ttttttttgg ggggtttaat 240
cattgtgtag catgaattgg tgctggacta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 300
aaaaaaaaa aggtataaaa gttaaacaca acaataaaaa caaacat 348

<210> 2023
<211> 419
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-G8

<400> 2023

attcgcgggt cgacgggaac aggaaggtgc gagcggcgct gagggaggct gagaggaagg 60
tgctggaggc caggaagaag aaggacgtg ctccggaaac caatgcggct tacttgggtg 120
ggtttgcat gcccaatgac ccagctgagc agctcaagca caggggatac catatggttg 180
caggtgcagt ggacattggg ttgttccgga aggcggcatt ggaggatgtc aagcggttca 240
aggaggcgct aatggagatt ggtgaagcag agggcgagga ggaggatgag aaggaagatg 300
gatactggag tgaatgagca ctggggaact ggtgatggct tcatttgttt gtgttctgaa 360
ttgaagcttt tagggctctc attttctgga ctttggtgta ctcttgttta gtcgatgat 419

<210> 2024
<211> 462
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-049-Q1-E1-G9

<400> 2024

ggtaccgatc cagaattcgc gggtcgacgg ggctctccat ggcgtccacc ttcgttggca 60
actcgacctc catccaggag atgttccgga gggtagcgga gcagttcact gccatgttca 120
ggaggaaggc tttcttgcac tggtagactg gtgaaggcat ggacgagatg gagttcaccg 180
aggcggagag caacatgaac gacctcgtct cggagtacca gcagtaccag gatgccactg 240
ctgacgagga gggcgagtac gaggatgagg atcaggagcc tgaggaggac atgtaagggtg 300
ggatgtccat gtcgtgcttt gctgggtggg ggttctgggg gcagagtttg atctgtntgg 360
tgctttgtta taaatctgtt tatcatcgca actaccgctt gtacgccanc gccattcctc 420
ctgctttcct aagctctgta tttcctatgt tatggcacct tt 462

<210> 2025
<211> 405
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-049-Q1-E1-H1

<400> 2025

cggtcgtaaa tencgggtcg acgggggatgg tcaggctggc atgaagcaag gggatctaata 60
catttggtat gttgagcagc agaatgccca aggcgcatat agttctacag aagaggtgaa 120
ggaggaagta aagtgcatac aggccattat agagaggctg atacagaggg aaggccatct 180
tgtagtcata gatgaaggaa cagcggcagc agaagggtgt acggcaaggg catcggagca 240
cagaatcctg gctgttaacc caaactacgt cattgattga ttaaccagct gaggtcacac 300
agctaactag atccatcata tgtggttgac caatatagca gacattcaaa cggaagacat 360
cctgttgtea tgctctagaa atgatatgtt gcacctgcca tcccc 405

<210> 2026
<211> 467
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-H11

<400> 2026

aggtagcgat ccagaattcc cgggtcgacg ggtatataca tggtatataa aaaaaatatt 60

agtaattata aaaagagtta aaaaattcat aaactttttt ggattttttt actttctttt 120

gtagatgtat aattttttta acgaaatcaa aactcccatt gacatttggg cgaataacaa 180

tatcgtaatt acaaaaagag taaaaaatta tgaattgttt tggaactgaa ttttagtttt 240

tttgtagttg tataaaaagt tcggtgaaat aaacaccccc attgactttt gggattaaaa 300

aggaaaatca taattacaaa aagattcaac atagtctgaa tatttttgaa aattattcca 360

ctttttcgta gctatataga aagtttgga caaaattccc attgatttct gggcgaaaaa 420

acaaaatcac aattacaaaa aagttaagtt ttttaatttt ttggaaa 467

<210> 2027

<211> 349

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-H4

<400> 2027

ggtagactga gcaaggtgga ccggtgctc tactccctcc gtcgtcaacc cgcacaacta 60

cggttctatc ccgcgaaccc tcggcaacaa ctccgaccca atcaacttct tcgtcatcat 120

gcaggacccc ttctgtcccc gatgcttctt ccgcgccaaag gtcattcggac tcatgcccatt 180

gatcgaccag ggcatgccc acgacaagat catcgccgctc tgccgccgacg accccgagta 240

ccgccacttc aacgacatca aggacctccc tccccaccgc ctccgccgaga tcaggcgatt 300

cttcgaggac tacaagaaga acgagaacaa agaggtggcc gtcaacgac 349

<210> 2028

<211> 403

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-049-Q1-E1-H9

<400> 2028

gtaccgatcc agaattcccg ggtcgacggg cgcttgacaa ggtaggata ccaagcgagt 60

gtttaggatc ccacacaggg catttcttga catgctccta gcacaccttg ggctaatacac 120

cggctcagta tgatcgtgtt gtacatgagg acggcaagat ctgtgtgacc atctttttca 180
 acacctctac attggatctt ggaggaccaa tcagtatgaa cgcgtcgtgt catcattcct 240
 cctgggtctac attatgcccc agacatgcaa agttgtggat cgtctgtaag ctaccatttg 300
 ctttcgtacg tcttatgtct gtgatatttg ctactaaacc tattgtgcta cgtgctttcc 360
 gttttcgtac attgttaggt ggctccctat tgtgtgcata caa 403

<210> 2029
 <211> 416
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-050-Q1-E1-A1
 <400> 2029

taccggtcca gaattcncgg gtcgacgggg tgcccatgac agctgagggtg acattaccgg 60
 tactggcacc ggcgagcgcg acaccggcca tgactacact cggcatggag aagccgggag 120
 tgaagctcaa tggtaagaag tctcactctg aaatgatgca gatcatggat gaagctagtg 180
 aacttctgaa gaaaggcaat gacttctctc cgctgaatga ggagaacgtt aagcctttgt 240
 tgagtatgga tggatcagct gatgcatggt ggcttgatag tggtgctagt aaccacatga 300
 ctggttcacg gtgcaaattc aaggagatgg atgaaagcat ccgtggccat gtgaagctcg 360
 gagatgggtc tactgctctg attaaaggga aaggttcagt catggttgaa tgcaag 416

<210> 2030
 <211> 412
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-050-Q1-E1-A2
 <400> 2030

accggtccta aaatcncggg tcgacgggac ctcaccggca gatccctcag ctatcagggga 60
 aagcagccat cagcggagat tgagggtgcc tctccggcga gaggctcgt gtcgtggtgg 120
 tttcccacca gcggcatggg ggaggcggtg tctctaccg ctaggtctac ttgctggcga 180
 cctcaccgtc accagcccat ctgtagccta cttgaatgga tatggttcct gagagaccat 240

ttcttatgca tcaggctcctg aagggtggatg ttgcttggtt agatatctat ggttcctaaat 300
tattcaaaac ggttcatggt atgctggatg ctattttatt gagagtggct tcgaacaata 360
tggtcatgaac atatttggtt tctctttggc caataatgaa atgatctttg tg 412

<210> 2031
<211> 417
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-A4

<400> 2031

gggtcgacgg ggagcgccca caaaggattc agtcccatcg agaagaaatt cataaggttg 60
ctacatgatt gtaatgtcgg tccatcaaga atgggtccaa tactgtccct gatccacgac 120
cgagatggga gctgagtag catgccctac ataccagcag acgtcaaaaa cctaaaggca 180
aagtaccgta gagagagcag gttggctgac atagaagaca caatagccta cttcgaagag 240
aaagcaaaag cagataatga tttcttctac aggataaggt tggacgatga ggaccgtgtc 300
aggaacatgt attgggtgga tgggtctgca agaagagcct acaaacattt ctgtgattgc 360
atttcattca atgcaacata tctcacgaat atgtacaaga tgccccgtgc tccattc 417

<210> 2032
<211> 424
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-A8

<400> 2032

taccggatcc gagaattcgc gggtcgacaa ggagcaacac cactgcaaag actgcggcat 60
ctgcagagtt gggggcaagg acaacttctt tctactgccac aagtgcggat cgtgctactc 120
ggtgaccctc cgggataagc atgtctgcat cgaggactcg atgaagaaca actgcccgat 180
ctgctacgag tacctgttcg actccctgag ggaggcgtcg gtgctgcat gcggccacac 240
catgcacttg cagtgttcc acgagatgct caagcacgac aagttcactt gccccatgtg 300
ctccgtgtcc atctttgaca tggagaaatt cctgagggcc ttagatgccg agattgaggc 360
gaagttctta cacatgggaa agggatggat cgtgtgcaac cactgctggg acacgacccg 420

ggtg

424

<210> 2033
<211> 415
<212> DNA
<213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-A9

<400> 2033

cgggtcgacg ggctgggtgc aggaccctca tattcaagag ctgcttctca agcagacgga 60
taacgcaaga gctgccgccc gagagaaagc caagatggat caacttgagt tagacgcggt 120
tactccattg tatgaaggat gcaggcccga ggataccgc ctgaaagtaa cgctcatggc 180
tctggagatg aaggtaaaac acaaaatgac cgacgcatgc ttcgacgaga acatgtcatt 240
ctggcaegaa cgtcttccca aggggaacaa gtgcccgaact agtttggagg aggcgaagaa 300
aatcgtgtgt cctctggatt taccgcacgt gaaataccat gtgtgcatga acaattgcat 360
catttatcgg gacgagcaca cggagtctac catatgtccg gtgtgcggtg tcaact 415

<210> 2034
<211> 435
<212> DNA
<213> Triticum aestivum

<223> unsure at all n locations
<223> Clone ID: LIB103-050-Q1-E1-B11

<400> 2034

taccagtcaa gaattcccgg gtcgacgggg agtcttcgaa tggttgcata attatttagc 60
tactcattga tcttcacgta tatcttggtg gagtagtttg tcgtttgctc tagtgcttca 120
cttatatctt ttagagcacg gcagtgggtt tattttgtag aaattaatga actctcatgc 180
ttaacttata ttattttgat agtcttaaac agcatgggat tttgaatgaa aactatcata 240
ggaagtgaat tggatgctat gatcaatttg atacttgata attgttttga gatatggagg 300
tagtgatatt aaagtcacgc tagttgggtg attatgaatt taaagaatgc ttgtgttgaa 360
gttatcaagt cncgtagcat gcacgtattg ttaaagttgt gtagaaaatt tgatgcatga 420
agtgtacctg gcctg 435

<210> 2035
 <211> 431
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-050-Q1-E1-B12

<400> 2035

aattcncggg tcgacggggc cagaaagcaa tgaacatct aaataaactt ttcccgaaca 60
 aaatttccat ccagcttcca caggacgaag cactacttac cagttggaag caacaattgg 120
 atcgtgatgt tgaaccctt aaagcaaat ctaacatcgg tagcattcgt acgtttttga 180
 atcgcagtgc gatcgaatgc agtgaccttg aagaattatt cattaaagat cagtcactga 240
 ctaatgaaaa tgtggacaag attgtcgggt acgctgtcag ttatcatctt aagcacaata 300
 aagtcgaaac ctccaaggac ggtgaactta ttatcacgag tggaagcctt aagcatggcc 360
 tcgacatgct acagagcatc catagtata acaagagctc aaaaaaatcg ttaaaggatg 420
 ttgccacaga g 431

<210> 2036
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-B4

<400> 2036

gggtcgacgg ggaaaacgga cagcccatgg acgaggagta tgaggaggag caggttccag 60
 attactcgag agcctattct ggtggattga gacccttgc ccatgtcatg atggatgatg 120
 agaccgagga tgatgatgaa gatgctgaag gggacggaga gggcgacgag gaagaatatg 180
 acgtgaacca tgcttccgcc gatgttgatg atgagatgga cgaggatgat gatataggtg 240
 atgatgggga tgatgggtgt gatggagtgt aggtgaatgc agatgaagat gaaggcgaga 300
 cctcactatc gtcagagtac agtgaataag agcttctgtc tccggtgacc atttatgcag 360
 ggtagttaat taacgccgtt ggtcactgat ccgtagatct tggcggaagt gggtttggga 420
 actgatataa aat 433

<210> 2037

<211> 436
 <212> DNA
 <213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-B6

<400> 2037

gtaccggacc agaattcccg ggtagacggg actgcctgct ccctcctccc gcgaccggct 60
 atgctgctgc gtagacctca cggccccacc gtactcccat cgctgaccta gccatccctc 120
 tactcatcca cacctgttgt tattctccgg ggacggcaga cgaaccagta aaccctcgta 180
 ctctccacg tgggaacaaa ctactgagtc ttcctggct ccatgtcgtt cccttcctag 240
 gcctcgccgt cgtccaccgc cctgggtgctc tcgggtgtggc ctgggtcaaca tgggtcaatga 300
 acgacatcca tcggaagtgg actgtacgtg gagaggctga cagctgggtc cacagccgca 360
 cgcaaggaaa tgctctctta ttacgcgcaa aataatgatt ccctcactgt cggatgtggg 420
 gttccggcaa aaccct 436

<210> 2038
 <211> 433
 <212> DNA
 <213> Triticum aestivum

<223> unsure at all n locations
 <223> Clone ID: LIB103-050-Q1-E1-B8

<400> 2038

gtaccgggtcc agaattcccg ggtagacggg atccccgcct cggcctcgcc tataaataga 60
 gcctcccgag ctggtttctc tccacacacg ctctccacac acctccacaa caccgtagga 120
 agccgtagcc cggccgggta ggcctctggc cgccgttctc gccccgagct cgcacgcgat 180
 ccccgctccac tgccccctcc ctctctagag ccgcttgagc tctactgact tgtccgacgt 240
 gtccgtgggtg gtccactggt gcttgctggc gctgttgag ctattggact ggacctacct 300
 cactggaatc accatctccg acgagctcgt tgtcgtgcac tcctctccag agaaagcgcc 360
 gccaccgcgc cgcccaactc tgcttctctc ccctcncct ccgacttgat tgctggggct 420
 cgctgtcagc cgc 433

<210> 2039
 <211> 430

THE **WORLD'S** **LARGEST** **BOOK** **STORE**

<400> 2039

<210>	2040
<211>	433
<212>	DNA
<213>	Triticum aestivum
<223>	Clone ID: LIB103-050-Q1-E1-C10
<400>	2040

<210>	2041
<211>	400
<212>	DNA
<213>	Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-C11

<400> 2041

gtaccagtct agaattcccg ggtcgacggg gttgaatgaa tccattgtga gaagagccct 60
tgtgatcatg caccagaggg acgaagtgga gtacaagagg gagcgccatg tgattgtccg 120
caaggcttga gctgaaccga aatgatggaa ctaccatgga aaccctctgg ccatctgatg 180
tgtgtgtata agtagtgctg aactgcagc ctgtttcctg aggaaatttg ttgcgtcggt 240
gaaattgagt tgtagttgta ctactttaag ctgtagctgt agccctaaat tatcttgtgt 300
cgaactgaag atgtaccaca gtaagttcat tcatgattgc aacatttggg cgttctgcag 360
ctgagcagag ttaatgccta ggaaaccgaa acttggtgctt 400

<210> 2042

<211> 418

<212> DNA

<213> Triticum aestivum

<223> unsure at all n locations

<223> Clone ID: LIB103-050-Q1-E1-C2

<400> 2042

cgggtccagaa atcncgggtc gacgggcggc gggccagatc gaggaggaag gaggcgaagg 60
gatcgggatc gggcagatga gaggtgcgcg aggggatcta gcagggtcgc tgcgaggaga 120
agcaagagga gaggtggcgc ggcgtacggg agagatggga tcgagggaaa aagtgggatc 180
gagggagagg gaggtgcgcg cgctggaggg aagagggagg gagagatcga caggaggtct 240
cccctggcgc tagggttaga gggaaggagt gcggctgggc ttccaggggt ttgctgggcc 300
ggcctggacc aaggaggtt tgggccggac tgggctgcag atgggccggc cagcagctct 360
ctctctctct ctctctctct ctctctctct cttaatttct cttttcagca naagagat 418

<210> 2043

<211> 442

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-C5

<400> 2043

aattcccggg tcgacgggac aggccatgtc atcctccgcc ccaaagcagc tagtggcagg 60
gcctacaact gctgaggacg caccaccggt tcagatgccg gccgctgaag cagcgggggg 120
agaccagct gcagcacatg ctgagcagac caacctggtg gaacagactg ctaagcagtc 180
tgatgcttcg gaaccgcta ctaagcagtc tgtaggtcca gaaccgaccg ctcatcagtc 240
tgttgggtccg caggcgtgtg accagcatac caatgcgtca gcacttcctg ctgagcaaac 300
caacgcgttg gcacggcctc ctgagcacac cgacaagttg gcaccacctt cgcagaaacc 360
cgacatagct tcaacgcagc gtcagcagtc cgatgcctgg ctctacagc ccagcagttt 420
gtcacagcag caccgccagc tc 442

<210> 2044
<211> 462
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-050-Q1-E1-C7
<400> 2044

attcccgggt cgacggggat gttctggctg gcatgaagca aggggatcta atcatttggt 60
atgttgagca gcagaatgcc caaggtgcat atagttctac agaagagggtg aaggaggaag 120
taaagtgcac caaagccatt atagagaggc tgatacagag ggaaggccat cttgtagtca 180
tagacgaagg aacagcggca gcagaagggtg ctgcagcaag ggcacggag cacagaatcc 240
tggtgtgtaa cccgaactac gtcattgatt gattaaccag ctgaggacac agctaactag 300
atccatcata tgtggttgac caatagagca gacattcaaa cggaagacat cctgttggtca 360
tatgtcttag aaatgatatg ttgtacctgc catccccttc ccaaggaagc ataagatctc 420
tggaatttgt acctcaatca aagggttaaaa tgtggttaatt aa 462

<210> 2045
<211> 443
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-050-Q1-E1-C8
<400> 2045

gtaccggacc agaattcccg ggtcgacggg gaagaagacc aaggccgaga agcggccgcc 60

gaagtccaag gagggcggcg cgcacaagaa gaagaagaag gccagaaga gcgtggagac 120
gtacaagatc tacatcttca aggtgctgaa gcaggtgcac ccggacatcg gcatctcctc 180
caaggccatg tccatcatga actccttcat caacgacatc ttcgagaagc tcgccggcga 240
gtccgccaag ctggcccgtc acaacaagaa gccaccatc acgtccaggg agatccagac 300
ctccgtccgc ctggtctctc ccggcgagct cgccaagcac gccgtctccg agggcaccaa 360
ggccgtcacc aagttcacct cctcttagat aatctgttct cgtatcttct tggtcgttcg 420
atggtactct gttatactac tcg 443

<210> 2046
<211> 418
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-050-Q1-E1-D1
<400> 2046

gggtcgacgg ggaagtcggc cgccaaggag ggcggcgaca agaagggcaa gaagaaggcc 60
aagaagagcg tggagacgta caagatctac accttcaagg tgctgaagca ggtgcacccc 120
gacatcgga tctctctcaa ggccatgtcc atcatgaact ccttcatcaa cgacatcttc 180
gagaagctcg ccggcgaggc cgccaagctg gcgcggtaca acaagaagcc aaccatcacg 240
tcccgggaga tccagacctc cgtccgcctc gtcctccccg gcgagctcgc caagcacgcc 300
gtctccgagg gcaccaaggc tgtaccaag ttcacctcct cttaggctgt tcgtcttcct 360
gtgtctcgta gttagctgtt cgggtgtgtt tgtggccgtg ttatcctgta agaatcgc 418

<210> 2047
<211> 366
<212> DNA
<213> Triticum aestivum
<223> Clone ID: LIB103-050-Q1-E1-D10
<400> 2047

attcccgggt cgacggggac gcggacggca agggcaaagg gaaggagagg cgcagcaagg 60
agcagaagaa actcaagcag agaggaggaa agacaggggg caggagattt gaagtaaaga 120
gtaaactgaa gagcaagaga agatgaaaat gtatgtgtat ctttggaaga aattttgcc 180

gtttagtctg ttttttcgtt tcatggtagg tttcaccggt gaaaaaacat gccttgtgcc 240
 agtgtagcct tgcatagttt agtgcgaggc gattttcatg ttcaaaaaaaaa aaaaaaaaaa 300
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagataaa aacaaaaaat aaacatacaa 360
 acaaaa 366

<210> 2048
 <211> 388
 <212> DNA
 <213> Triticum aestivum
 <223> unsure at all n locations
 <223> Clone ID: LIB103-050-Q1-E1-D11
 <400> 2048

attccccggg cgacgggctc tcctatgcta gttgattatt gttcctacaa gttatttgct 60
 cacaaaatcc ctatgcatag gaagtgggtt agacttaaata ttgctaataca tattcttcat 120
 gatgctctct ttatgttaca attcttatct tttatgtgag catcgttgag atcatcatgc 180
 ctagctaggg gcattaaacg atagcgcttg ttgggaggca acccaatttt attttggttc 240
 cttgcttttt gttcctgttt agtaataaat aattcatatg gcctctgctt agatgtgggt 300
 ttatgctttt aattagtgtt tgtgccaaagt agaacccttg ggaagacttg gggaaagtcn 360
 tgttgatcat gctgtaaaaa acaaaaac 388

<210> 2049
 <211> 181
 <212> DNA
 <213> Triticum aestivum
 <223> Clone ID: LIB103-050-Q1-E1-D12
 <400> 2049

attacaacac cctatagtga gtcgtattag ttctacaag ttatttgcg agagaatccc 60
 gatgggcagg aagttgggtga gatggtatat gtgctcgta gattctgcat gatggctcg 120
 gtgggtgaga attcgtatct tttatgtgaa cggcgttggt tatgatcgtg gggagttagg 180
 g 181

<210> 2050
 <211> 398

<212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-050-Q1-E1-D2

 <400> 2050

 cggtcgacaa ttccgggtcg acggggtg tgcagcagcg attcgacact attctttttt 60
 ctgctttcct ctgcttctat tctctttttt ggcacgcct ctattctttt tttctttttt 120
 tgcagggttg gcatcgctc tattcgaaaa gccggagaat agaatggggg atgttctgta 180
 atggtttttg atatacttaa gtacataatg catgcagatg aaccggcaac ggatgcacgg 240
 tgaccgaaca tctatattga gggcctgcat aattttctcg aagtggctga gacaaacaag 300
 cagaatggtt ttatgtattg tccatgtact gtctgtgggg caaaaaaaaaa aaaaaaaaaa 360
 aaaaaaaaaa aagcggccgc tctaaaggat tcaagctt 398

<210> 2051
 <211> 456
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-050-Q1-E1-D7

 <400> 2051

 attccccggg cgacgggttt tgcaataagt atgtgagttc tttatgccta atgttgagtc 60
 catggattat acgcactctc acccttctac cattgctagc ctctctaata ccgtgcacct 120
 ttcaccggtg tcatcacccc accatatatc ttcctcaaaa cagcctccat acctacctac 180
 tatggcattt ccatagccat tccgagatat attgccatgc aactctccac tgttccgttt 240
 attatgacac gctccatcat tatcatattg ctttgcagta tcatgtagtt gacatcatat 300
 ttgtggcaaa gccaccgttc ataattcttt catacatgtc actcatgaat cattgcacat 360
 cccggtacac cgccgaaggc attcatatag agtcatatct tgttctaagt atcgagttgt 420
 aattcctgag ttgtatagaa aattaaagtg cgatga 456

<210> 2052
 <211> 420
 <212> DNA
 <213> *Triticum aestivum*

 <223> Clone ID: LIB103-050-Q1-E1-D9

<400> 2052

attccccgggt cgacgggatg aaccaatccg caccgcagac attccgttcc aaggagatct 60
ccaagagcaa cgtggtggat gacatggtct cgagcaatgc taccctctac gagcctgggg 120
agcatcctga ccacgtcgtc gtgatcaagt atgtgccata cggtggagac agcaagaggg 180
ccatggacga gtacacctcg gagatcttca tggggggcaa gagcaccatc gtgctgcaca 240
acacctgca ggactcgctc ctgcccgcac ccatcatcct tgacctgggtg ctcttgcccg 300
agctcagcac caggattcag ctgaaagccg agggagagga caagttccac tccttccatc 360
cggttgccac catcctgagc tacctacca agggcaccct ggttcctcct ggacacccgg 420

<210> 2053

<211> 448

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-E10

<400> 2053

gtaccgagtc cagaattccc gggtcgactc gactgcggag tgcgagagat tggctttttt 60
agacgcctat tccgggtatc atcaaatccg tctgtatgga cctgacgaaa tcaaaacagc 120
tttcatcagt ccattcgggt gcttctgcta tatcaccatg ccattcggtc tcaagaatgc 180
cggagccacg ttcattgaaa tgattcaaaa gtgtttactc actcaaatca gtcggaatgt 240
ggaagcatac atggatgata tcgtggtcaa gtcacgaaaag ggttccgacc tgttgactga 300
cctagctgaa acatttgcca atctcaggag atatgatatt aagctcaatc catcaaagtg 360
cacattcgga gtgcctggca gaaagtact cgattttctc gtttcagagc gaggaatcga 420
tgctaaccga gaaaaagtta gcaccata 448

<210> 2054

<211> 407

<212> DNA

<213> Triticum aestivum

<223> Clone ID: LIB103-050-Q1-E1-E11

<400> 2054

ggtaccgagt ccagaattcc cgggtcgacg gggacgggga gccgccggtt cgaagaatgg 60

ataaaggcct cgactccggc gagtgctgac ggtggcaggg ccagaccggc ggccgccgga 120
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ctgggaggag caggtgaggg tgatgccaaag gaaggggacg cggatgatgt ggtggcggag 240
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tttgactaat tctggatggg tctatcccca tcttgcgac agtgtcctca tatataagat 360
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<212> DNA
<213> Triticum aestivum
<223> unsure at all n locations
<223> Clone ID: LIB103-050-Q1-E1-E2
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<212> DNA
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<223> Clone ID: LIB103-050-Q1-E1-E6

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<211> 437
<212> DNA
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<223> Clone ID: LIB103-050-Q1-E1-E7

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